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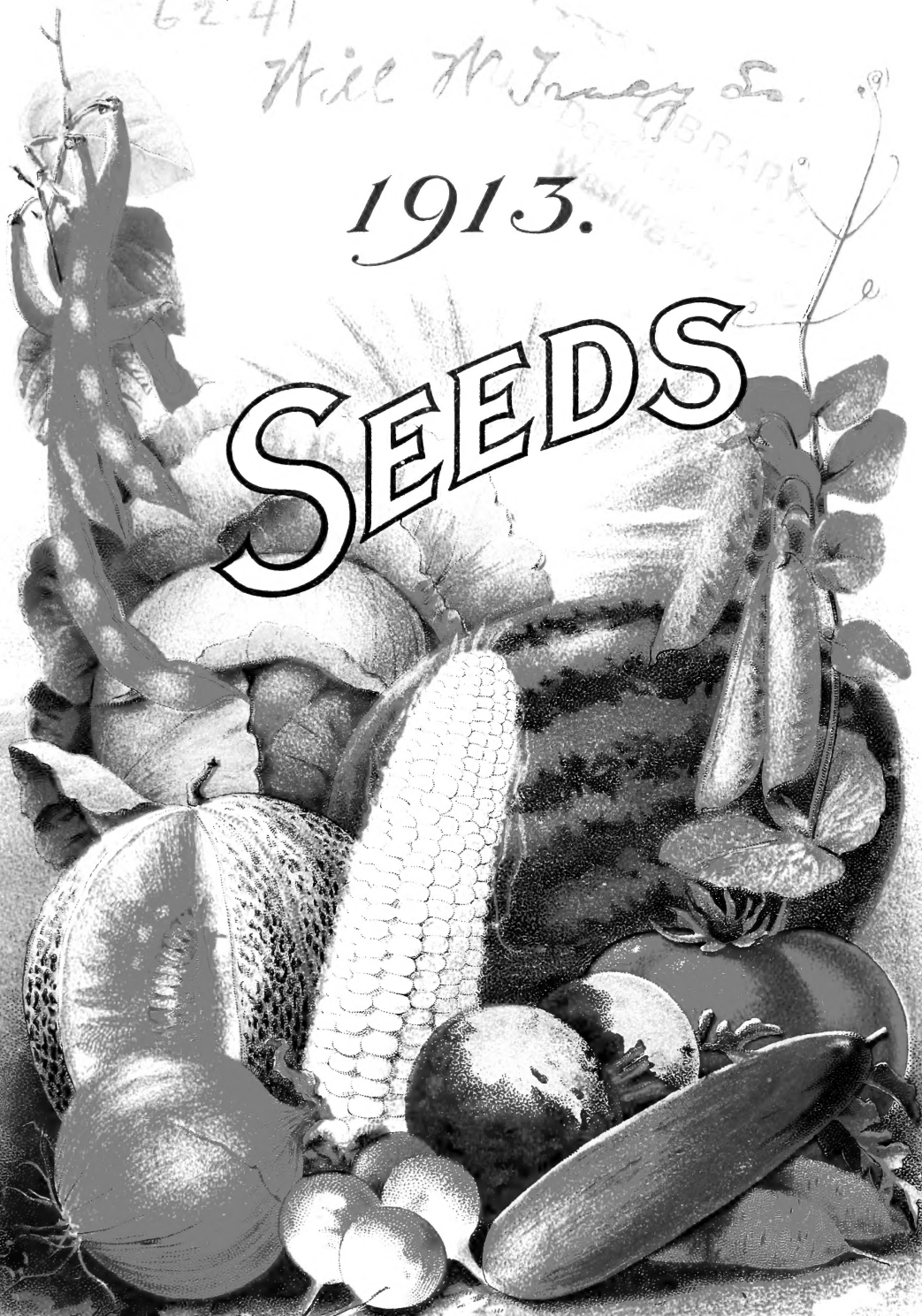
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W. H. Jones & Co.

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1913.

SEEDS



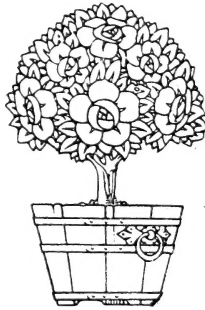
THE JONES SEED CO.

GRAND RAPIDS, MICH.

STECHER CO. ROCHESTER, N.Y.



Garden, Flower and Field Seed Catalogue



1913

The Jones Seed Co.

11 N. Ionia Ave.

Grand Rapids, Mich.

The JONES SEED CO.



AS incorporated under the Laws of the State of Michigan, with F. M. Beach, Sr., F. M. Beach, Jr., L. F. Jones and W. M. Hofs stockholders. The Jones Seed Co. will continue the same policy in the future, as in the past, of buying the best seed obtainable and giving our customers a fair deal, and the fact that we have the largest market gardeners' trade of any seed house in the State proves that our customers are satisfied.

There are no more critical buyers of seeds than the market gardeners, as their success depends largely upon the quality of the seeds they plant.

While we take the greatest pains to procure seeds true to name and personally test them for germination we cannot be responsible for the crop nor guarantee them in any way either directly or indirectly and if the seeds are not accepted upon these terms they may be returned and the purchase price will be refunded.

We sell Cypher's Incubators and Brooders, Mandy Lee and Buckeye Incubators, Simplex Brooder Heaters and a general line of Poultry Supplies. Write for catalogue of poultry supplies.

In ordering seeds by mail the money must accompany the order. We do not ship Garden Seeds C. O. D. Seeds may be shipped by Parcel Post up to eleven pounds at one-half cent per ounce to any point in the United States. The Parcels Post rate on Merchandise does not apply to seeds. Where more than three pounds are wanted it is cheaper to ship by express. In ordering seeds by mail add one-half cent per ounce to catalogue price of small seeds and ten cents per pint for Corn, Beans and Peas.

The JONES SEED CO.

11 N. Ionia Ave. :: Grand Rapids, Mich.

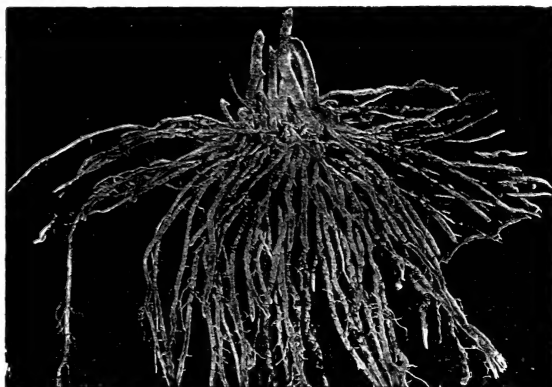
Wm. H. Jones & Co.

Jones' Market Gardeners Wholesale Price List

In ordering seeds to be forwarded by mail add to the amount of the Order Postage as per introductory page.

ASPARAGUS.

Asparagus can be grown in any good garden soil. To grow plants from seed, sow in drills about one inch deep, in rows a foot apart. Keep the soil mellow and free from weeds during the summer, thin out and the following spring plants may be set in beds 6 feet wide with a 2 foot path each side, set plants one foot apart



each way, four inches below the surface. Annually after cutting, the bed should be given a liberal top dressing of manure, ashes and salt, which should be well cultivated into the soil. As soon as the tops turn yellow in the fall they should be cut and removed from the beds, and just before winter cover the bed with four inches of coarse strawy manure or leaves, which should be removed in the spring. A bed 60x60 feet is ample for an ordinary family and when well established is good for twenty years. One ounce of seed will sow 60 feet of drill. About 400 plants to the ounce.

Asparagus Roots, 1 year old, 75c per 100; \$5.00 per 1,000.

Asparagus Roots, 2 years old, \$1.00 per 100; \$6.00 per 1,000.

Conover's Colossal—One of the largest and most extensively grown green sorts. Shoots bright green, sometimes tinged with purple at the ends, very large, many an inch in diameter, tender and of the best quality. Ounce, 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 50c.

Palmetto—A very early maturing variety. Producing large deep green stalks, tender and well flavored. Said to be nearly rust proof. Ounce, 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 50c.

Columbian Mammoth White—A new and distinct variety, whose shoots are white and stay white as long as fit for use. It is very robust and vigorous in habit, throwing a large number of large stalks, and requires no earthing up in order to blanch. Ounce, 5c; $\frac{1}{4}$ lb., 15c; 1 lb., 50c.

BEANS.

Pole Beans.

Pole and Lima beans are apt to rot if planted too early, they should be planted about the middle of May if the season is suitable. They succeed best in a sandy loam, which should be liberally enriched with manure. Form hills 3 to 4 feet apart, plant 5 to 6 beans in a hill 2 inches deep, leaving space in center for the pole, when well started they should be thinned to 2 or 3 plants in a hill. One quart makes 100 to 200 hills, according to size of beans. Eight to twelve quarts will plant an acre.

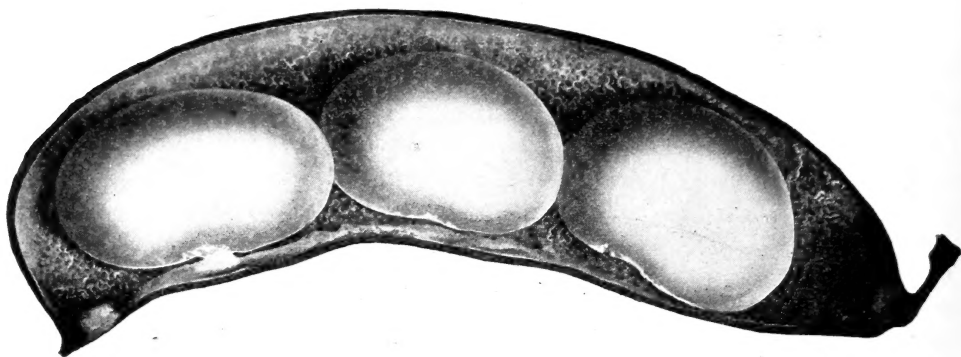
Kentucky Wonder—Eighty days, vines vigorous and very productive, bearing their pods in large clusters. Pods green, very long, often reaching 9 or 10 inches, nearly round; very crisp and tender. Quart, 25c; peck, \$1.50; bushel, \$5.50.

Siebert's Early Lima—Vines hardy and productive; beans large and of excellent flavor. Quart, 25c; peck, \$1.75; bushel, \$6.00.

Early Leviathan Lima—This is a new sort of Lima bean which comes highly recommended. It is one of the earliest Lima beans on the market, claimed to be a week earlier than any other variety. Equal to the other Lima beans in size and quality, and enormously productive. We have a limited quantity to offer. Quart, 30c; peck, \$1.75; bushel, \$6.50.

King of the Garden Lima—Late, very productive, large pods containing five or six large well-flavored beans. Quart, 25c; peck, \$1.50; bushel, \$5.50.

Dutch Case Knife—Pods long, flat, green, seed white. Used largely for slicing and canning. Quart, 25c; peck, \$1.50; bushel, \$5.00.



New Wonder Bush Lima.

New Wonder Bush Lima—Earlier than Burpee's Bush Lima, from which it originated. The plants are large, compact, long bearing and very prolific. The shell pods are green, of smooth surface, slightly curved, uniform and large, usually containing three seeds. Supply limited. Quality excellent. Quart, 30c; peck, \$1.75; bushel, \$6.00.

Dwarf or Bush Varieties.

Culture—Plant about the middle of April if the ground is warm, and at intervals during the season for succession, plant in rows 13 inches to 2 feet apart, the beans about 2 inches apart in the row, and 2 inches deep; keep well hoed, only cultivating them when dry; working the beans when vines are wet will cause them to rust; 1 quart to 100 feet of drill.



Burpee's Stringless Green Pod—

This new bean combines unusual hardness, extreme earliness and great productivity. The pods are a rich green, very round and straight, five inches long, meaty, tender, brittle and entirely stringless. Quart, 25c; peck, \$1.50; bushel, \$5.50.

Refugee, or Thousand to One—

Very early, maturing in about forty days. Vine large, spreading, hardy; very productive, highly esteemed for late planting and for canning. Pods long, cylindrical, slightly curved, green when ready to use as snaps, tender and stringless. Quart, 25c; peck, \$1.25; bushel, \$4.50.

Dwarf Horticultural—

Pods medium length, cylindrical, curved, with splashes of bright red on a yellowish ground. They become fit for use as green shell beans very early. About equal to the Lima in quality although different in shape. Quart, 25c; 4 quarts, 70c; peck, \$1.25; bushel, \$4.50.

Dwarf Wax Varieties.

Dwarf Golden Wax—Thirty-five days, very productive, pods long, nearly straight, broad, flat, color deep golden yellow, very fleshy and wax like. This bean has been grown since 1876, and is one of the very best for market gardening. Quart, 25c; peck, \$1.60; bushel, \$5.50.



Michigan White Wax—This new bean is a white seeded dwarf, golden wax, but is distinctly superior to that popular old variety. The vine is a little larger, more robust and vigorous; foliage a little heavier. The handsome pods are produced in greater abundance and are very uniform in size and color which is a beautiful light golden yellow; pods are broad, meaty and of the best quality. The seed is of medium size, oval and clear white. As snap beans they cook without discoloring, as dry beans they are handsome and just as good as the common pea beans. There is no bean that so nearly meets the requirements of the canner as to earliness, color and quality. Quart, 25c; peck, \$1.60; bushel, \$5.50.

Challenge Black Wax—Vines erect, compact, bearing the pods well up the ground. The pods are clear waxy-white, medium size, round, curved very fleshy, crisp, tender and stringless. Compared with other early sorts, it is the first to give a good picking of pods. Quart, 25c; peck, \$1.40; bushel, \$5.00.



Dwarf Lima Beans.

Burpee's Improved Bush Lima—A bush form of true large Lima, very productive, beans large and of fine flavor. Quart, 25c; peck, \$1.75; bushel, \$6.00.

German Black Wax—This variety is an improvement on the old black wax or butter bean, to which it is far superior. Vines medium sized, with small foliage. Very vigorous, hardy and productive, maturing about midseason. Pods medium length, borne well up from the ground. Curved, cylindrical, fleshy, of a clear creamy white color and remain a long time in condition for snap, or string beans. Quart, 25c; peck, \$1.60; bushel, \$5.50.

Davis Kidney Wax—Immensely productive, pods very long, straight and handsome, color light yellow. The most profitable market garden bean. Quart, 25c; peck, \$1.50; bushel, \$5.00.

Pencil Pod Black Wax—New. Pods very long, round, entirely stringless and rich yellow in color. Vines vigorous and productive, superior to any wax bean for market gardeners. Later than Challenge Black Wax. Quart, 25c; peck, \$1.40; bushel, \$5.00.

BEETS.

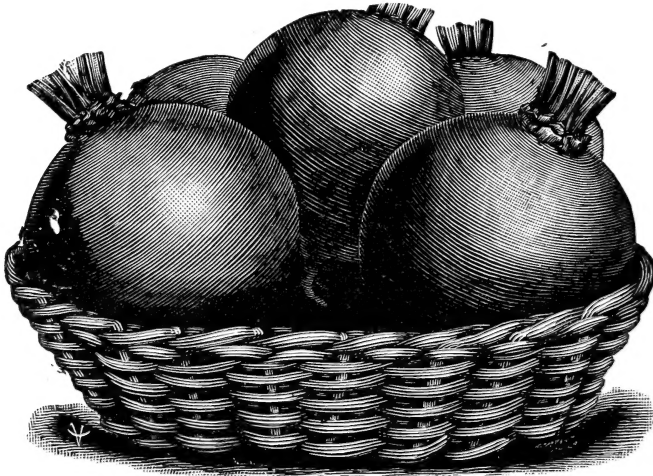
Beets do best on light, well-manured soil. For main crop, sow in the spring as soon as the ground is fit to work, in drills 18 inches apart and one inch deep. When the young plants are 3 or 4 inches high, thin to 5 or 6 inches apart. One ounce of seed to 50 feet of drill; 5 to 6 pounds per acre.

Early Eclipse—Forty days; perfect globe shape, color blood red; the foliage is longer and more vigorous than the Egyptian, making it better for greens. Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 90c.

Detroit Dark Red—Early, oval in form, skin smooth, very dark blood red, flesh bright red, leaves small and sweet. Ounce, 15c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Long Dark Blood—Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Crimson Globe—As its name implies, a perfect globe shape beet, dark blood-red color, smooth skin, sweet and tender. This is the beet brought out recently by one of the largest seed firms in England who claims it is a perfect sort for general use. Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 90c.



Crosby's Egyptian—The earliest beet on the market. Handsome turnip shaped, color deep red, almost black and very sweet. It is a rapid grower and the most desirable sort for early bunching. Can be sown as late as July for late crop. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Acme—This new variety is one of the best main crop beets. The top is low spreading, roots are thick, turnip shaped with small tap root, outside color dark purplish red, flesh crimson. Good canning beet. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.



Swiss Chard or Sea Kale—Superior to beets for greens. Plant forms broad wax-like stems which may be used as a salad or pickled. Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 70c.

SUGAR BEETS.

Culture—Same as mangels. Sugar beets are not as heavy yielders as mangels but are better quality and contain a large amount of sugar.

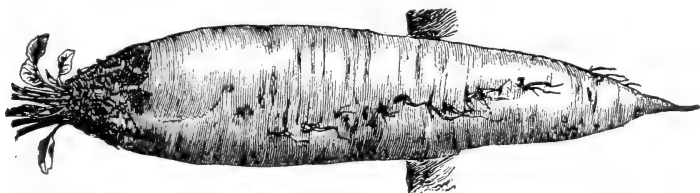
Giant Feeding Sugar—This valuable stock beet is the result of careful seed breeding and selection. It has the richness of the sugar beet combined with the size and yield of the mangel. It will yield twice as much as the sugar beet and is much easier gathered and keeps better. Roots are large, ovoid in form and very smooth. Ounce 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 40c.

Lane's Imperial—Ounce, 5c; $\frac{1}{4}$ -lb., 10c; 1-lb., 35c.

Klein's Wanzleben—Ounce, 5c; $\frac{1}{4}$ -lb., 10c; 1-lb., 35c.

MANGEL-WURZEL.

Sow in rows $2\frac{1}{2}$ to 3 feet apart as soon as the ground can be worked, cover the seed about $1\frac{1}{2}$ inches, making the soil firm. When four inches high, thin to 8 inches apart. Five pounds sow an acre.



Danish Sludstrup—Long reddish yellow. Grows well above ground and easy to pull. It has repeatedly been awarded a first class certificate by the Danish government, and is the best mangel in the world. Ounce, 10c; $\frac{1}{4}$ -lb., 15c; 1-lb., 50c.

Mammoth Long Red—Enormously productive, needs deep mellow soil. One hundred and twenty days. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 40c.

Golden Tankard—One hundred days. Tops comparatively small, roots large and ovoid in form, flesh solid, nearly white, zoned with yellow. Very productive. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 40c.

BROCOLI.

Culture, same in all essentials as cauliflower which it resembles, being somewhat coarser. It will stand greater variation of temperature than cauliflower, which is one of its most valuable features. One ounce of seed to 5,000 plants.

Mammoth White—This is the most useful sort. Plants hardy, vigorous and easily grown. Heads large, compact and of good quality. Ounce, 25c; $\frac{1}{4}$ -lb., 85c; 1-lb., \$2.50.

BRUSSELLS SPROUTS.

Paris Market—Of the cabbage family, producing numerous small heads or sprouts, an inch or two in diameter, formed on the stalk at each leaf joint, of the most delicious quality. Cultivate and use the same as winter cabbage. Ounce, 15c; $\frac{1}{4}$ -lb., 35c; 1-lb., \$1.25.

CABBAGE.

Cabbage requires deep rich mellow soil, high manuring and good culture to obtain good solid heads. For early cabbage sow the seeds in hotbeds or a box in the house the last of January and transplant in the open ground in April, in rows 2 feet apart and 18 inches in the row. For second early cabbage sow in April and transplant in May. For late sow in May and transplant in July in rows 3 feet apart and 2 feet in the row. One ounce of the seed will produce 2,500 plants. Four ounces per acre.



Early Spring—The earliest flat headed variety, nearly as early as the early Jersey Wakefield. Very compact head with few outer leaves so that a great number of heads can be grown on an acre. The plant is vigorous, with short stem, the leaves nearly round and of a distinctive light green color. The head is very large for the size of the plant. Ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

Henderson's Early Summer—Ten or twelve days later than the Jersey Wakefield. Plants strong, growing with numerous spreading outer leaves. The head is of medium size, round, somewhat flattened and keeps longer without bursting than the most of the early sorts. Valuable for the home garden and market, and well adapted for kraut. Ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

All Head Early—Heads large, very solid, flat, but deep, uniform in size and shape, very few outer leaves and more plants can be grown on an acre than most other sorts. Ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

Early Winningstadt—One of the best of the second early sorts, very hardy and sure heading. Owing to its compact and upright habit of growth and the peculiar texture of its short, thick, rich dark green leaves it seems to suffer less from cabbage worms than other sorts. Head of medium size, sharply pointed, very hard and of excellent quality. Keeps well both summer and winter. Ounce, 20c; $\frac{1}{4}$ -lb., 50c; 1-lb., \$1.50.

Henderson's Succession—A sure heading, long keeping variety, very similar to All Seasons but a little later. Head deep and very firm. Ounce, 25c; $\frac{1}{4}$ -lb., 75c; 1-lb., \$2.50.



Jones' Late Flat Dutch—An improved strain of this variety; heads large and more solid than the loose-headed Flat Dutch. Ounce, 20c; $\frac{1}{4}$ -lb., 50c; 1-lb., \$1.50.

Glory of Enkhuizen—A valuable new second early cabbage. Heads round, very solid, with but few outer leaves, and of such compact growth as to permit quite close planting, thus increasing the yield of a given area. The heads are of medium size (weighing from six to eight pounds trimmed) tender and of fine flavor. They keep well and consequently are valuable for later sowing for winter cabbage. Ounce, 50c.



Jones's Earliest Jersey Wakefield—The very best early cabbage in cultivation. Grown extensively for market and shipping. Forms solid heads of fair size, conical in shape, with few outside leaves. Our seed is from selected stock, and is the earliest strain of this variety. Ounce, 25c; $\frac{1}{4}$ -lb., 75c; 1-lb., \$2.50.

Charleston or Large Wakefield—A little later than the Early Jersey Wakefield, but the heads are larger and not so pointed. Ounce, 25c; $\frac{1}{4}$ -lb., 75c; 1-lb., \$2.75.

All Seasons—Heads very large, round, somewhat flattened, solid and of the best quality, keeping as well as the winter sorts. Plants vigorous and sure heading, leaves large and smooth with dense bloom. Remarkable for its ability to stand the hot sun and dry weather. Ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$1.90.

Hollander—Very hardy, solid and of fine quality. One of the best keepers, it is particularly desirable for spring use. Plant is vigorous and hardy with longer stem than most sorts. Heads a little larger than the danish ballhead with trifling difference in shape. Heads medium size, round, very solid and stand shipment well. Ounce, 25c; $\frac{1}{4}$ -lb., 75c; 1-lb., \$2.50.

Fottler's Early Brunswick—One of the best second early sorts for the home garden. Plant of dwarf compact growth, with very short stem and few outer leaves. Head large flat, solid and of excellent quality. Ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

Large Late Drumhead—Plant large with few outer leaves. Head very large and deep, sure heading. On good rich soil will grow very large compact heads, and on poorer soils will grow good sized. Good keepers. Ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$1.60.

American Savoy—The best of the main crop or late savoy for the home use or for the market. Plants vigorous with short stem, densely crumpled leaves and very sure headers. Heads large and solid, quality excellent. Ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

Surehead—One of the most reliable main crop cabbages. Plant has short stem and many outer leaves. Head large, thick, somewhat flattened, very solid and uniform in size and color. Ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.



Danish Round Winter or Danish Ballhead—Heads medium size, very solid and deep color white, fine grained and excellent quality. As this cabbage is so solid and heavy, it makes the very best cabbage for distant markets and is a splendid keeper. Ounce, 25c; $\frac{1}{4}$ -lb., 75c; 1-lb., \$2.50.



**New Savoy
Cabbage
"Iron Head"**

Earliest, Large,
Tender and Solid

Iron Head Savoy—This new cabbage is the earliest Savoy cabbage in existence. Heads large, tender and solid, round, of best flavor and hard as iron. Market gardeners will find it a money-maker. Ounce, 25c; $\frac{1}{4}$ -lb., 80c; 1-lb., \$2.50.

Mammoth Rock Head—The largest and surest heading red cabbage. Plant large, with numerous spreading leaves. Head large, round, very solid, of a deep red color. Ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

Odense Market Red Cabbage—Quite a distinct new dwarf red cabbage. Heads large, round, black soil. Stonehard. Splendid keepers. Ounce, 50c; $\frac{1}{4}$ -lb., \$1.50; 1-lb., \$5.00.

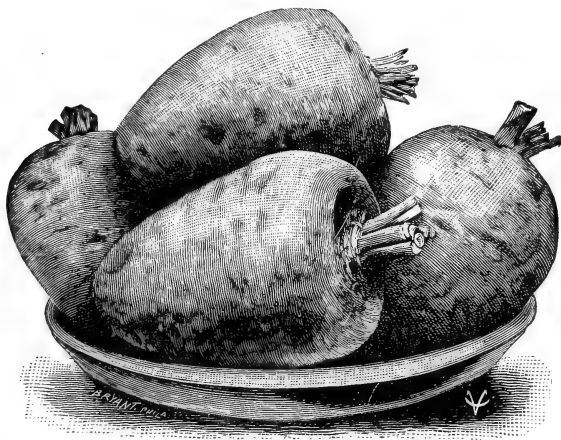
CARROTS.

Carrots, like other root crops, flourish best in a well-enriched sandy soil, deeply tilled, and if plowed the fall before all the better. Sow in early spring in drills 15 to 1 inches apart, finally thinning plants to 3 or 4 inches. If sown early or on moist soil half inch is deep enough to cover seed. Seed slow to germinate. Keep clean by frequent hoeing and weeding. If neglected the young plants are easily smothered, and the crop is lost. One ounce sows 150 feet of drill. Three pounds sows an acre.

Early French Short Horn—Early; good bunching carrot. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Guerand or Ox Heart—A thick carrot, very blunt on the end, easy to gather, fine quality and great cropper. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

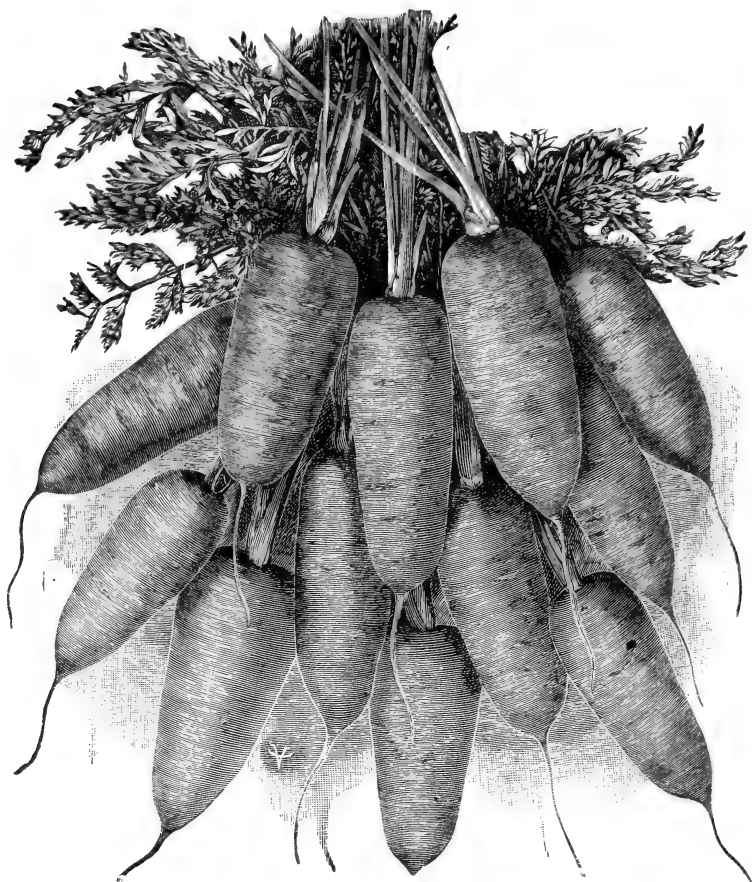
Improved Long Orange—A good carrot for deep mellow soil. Roots long, thickest near the crown, tapering regularly to a point, color deep orange. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.



Danver's Half Long—A half long orange carrot, grown largely on account of its great productiveness and adaptability to all kinds of soil. Tops of medium size, roots of medium length, tapering uniformly to a blunt point. Flesh deep orange, crisp and tender. Although the roots are not long they produce as large a crop as the longer varieties—20 to 30 tons being the usual crop. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Long White Belgian—Roots are very long, grows well above the ground, exposed part green, the balance pure white. Small top, flesh rather coarse, roots grow to a large size on light rich ground. Yields an immense crop. Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 70c.

Long Yellow Belgian—Similar to the white, but yellow in color. Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 70c.

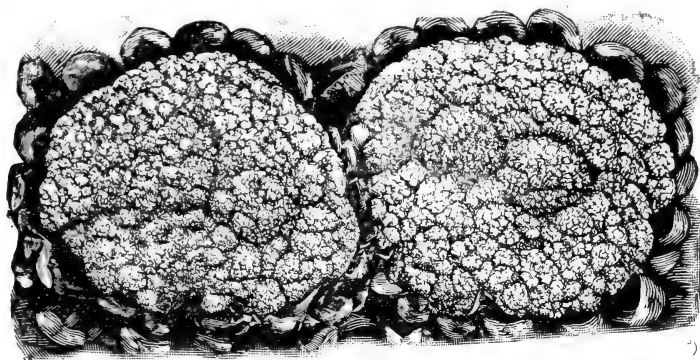


Chantena—A very productive second early sort, of excellent quality. Tops small. Roots thick, uniformly half long or stump rooted but tapering slightly, deep orange red in color. Flesh very crisp and tender. The roots are ready for use nearly as early as any, while its great productiveness makes it very desirable as an early market carrot. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

CAULIFLOWER.

The culture of cauliflower is similar to cabbage, but should be more thorough and ground made very rich. It delights in a rich, moist soil. Sow seed in the hot-bed in January or February and transplant the plants 2 or 3 inches apart in boxes or in another hot-bed until such time as they are safe to be planted in open ground, which in this latitude is usually from March 15 to April 10. For late crop sow seed at same time and treat in the same way as with late cabbage. Set plants in the field 2 feet by 15 inches apart. If properly hardened off they are

seldom injured by being planted out too early. When heading tie the outside leaves loosely over the head to protect it from the sun. One ounce gives 1,500 to 2,000 plants.



Henderson's Early Snowball—The earliest maturing strain of the true short leaved snowball type of cauliflower admirably adapted for forcing or wintering over also one of the best sorts for late summer or fall crop. The plants are compact with few short, outside leaves and are well suited for close planting. The heads are from medium to large size, solid, compact, round very white and curd-like. Our seed has been grown by the side of Henderson's, and other seeds much higher in price, and we know it to be the best type of seed offered to the trade. Ounce, \$2.00; $\frac{1}{4}$ -lb., \$7.00; 1-lb., \$24.00.

CELERY.

Celery will do very well on any rich garden soil, but does best in low, moist, rich bottom land or well drained muck. Sow the seed in the open ground early in April, making the soil very fine. Sow for late crop about first of May. Sow in rows so that it can be kept free from weeds, cover seed very lightly and fine the soil well. Keep moist until seed germinates. Some of the most successful growers set on a level surface, while others prefer a broad shallow trench only 3 or 4 inches deep. Trenches should be about 3 feet apart; set plants in single rows not over 6 inches apart in the trenches. Transplant about the middle of June for first early and as late as the middle of August for the latest. In about six weeks from transplanting the soil should be drawn from the middle of the rows around the celery with an ordinary hoe. Take hold of all the leaves of the plant with one hand, with the other draw the dirt around it, pressing it firmly, being careful that no dirt gets between the leaves. In about two weeks new dirt should be drawn to the rows to keep the leaves in an upright position. French grown celery seed very short crop and these prices are subject to being sold out.



White Plume—Early, uniformly white and free from green or hollow stalks. French grown seed. Ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

Golden Self Blanching—Rich golden yellow, close, compact growth, easily blanched, crisp and solid and grows to good size. Very scarce. French grown seed. Ounce, \$1.50; $\frac{1}{4}$ -lb., \$5.50; 1-lb., \$20.00.

Dwarf Golden Heart—Good for fall and winter use. Ounce, 20c; $\frac{1}{4}$ -lb., 50c; 1-lb., \$1.50.

Evan's Triumph—This splendid new variety is one of the best for main crop, will keep longer than any other kind, very strong and vigorous growth, stalks large, white, crisp, tender and finely flavored. Ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

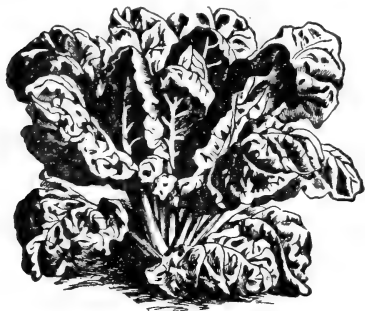
Kalamazoo or Dwarf, Large Ribbed White Solid—We have a good supply of this seed bought direct from one of the best French growers. While we feel every assurance of the stock being all right, we shall have it thoroughly tested this season and will not sell it until we know it to be good. Therefore we will not have any Kalamazoo celery seed to offer this season.

Perfection Hartwell—One of the best late sorts, producing large bunches of tall broad stalks, blanching to golden yellow. Ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

Giant Pascal—Ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

Soup or Cutting—Used for flavoring soups. Ounce, 15c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Celery Seed—For flavoring. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 40c.



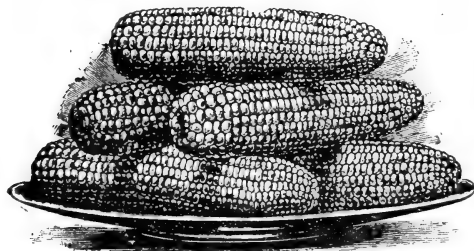
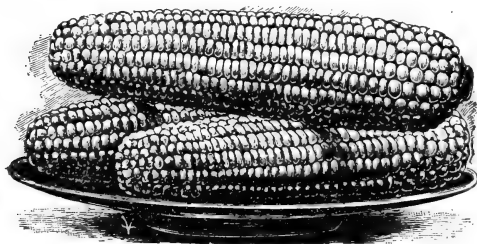
CELERIAC OR TURNIP ROOTED CELERY.

Smooth Prague—

Ounce, 15c; $\frac{1}{4}$ -lb., 40c; 1-lb., \$1.40.

Corn Salad—Used during the winter and spring as a substitute for lettuce and spinach. Ounce, 5c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

SWEET CORN.



Our Ohio grown sweet corn is unexcelled by either Eastern or Western grown stock. The sweet or sugar corn varieties, being liable to rot in cold or wet ground, should not be planted until May, or when the ground has become warm.



except the earliest varieties, which may be planted earlier, and for a succession plant every ten days or two weeks until the last day in July, in hills 2 by 3 feet for early kinds, and 3 by 3 feet for the large late kinds. Some plant in drills $3\frac{1}{2}$ feet apart and 18 inches in the row. Give frequent and thorough cultivation. One quart sows 200 to 300 hills. Eight or ten quarts for an acre.

Golden Bantam—A new early variety of sweet corn which many people consider the richest and sweetest of all corns. It is a medium early sort and yields very heavily. The corn is of a golden yellow color, and looks like field corn, but just taste it! Quart, 25c; peck, \$1.50; bushel, \$5.00.

Jones' Early Michigan—This new sweet corn came from Maine and has been grown by the Roach Canning Co., of Hart, for the past two years for canning purposes. It was first offered to the trade by us last year. The ears are about the size of the early Crosby, which it resembles, but is two weeks earlier being nearly as early as the Cory. Kernels are short like the Crosby, but very sweet. Jones' Early Michigan is a great acquisition to the list of early market sweet corn. Quart, 25c; peck, \$1.50; bushel, \$5.00.

Early White Cob Cory—Sixty to sixty-five days. This is a very hardy variety and may be planted early, stalks four to five feet high, very prolific, each stalk generally bearing 2 or 3 ears which are eight rowed with large coarse but tender kernels; has always been the favorite early market corn with Grand Rapids gardeners. Quart, 20c; peck, \$1.10; bushel, \$4.00.

Early Crosby—Second early, good sized ear, excellent quality. Quart, 20c; peck, \$1.00; bushel, \$3.50.

Early Champion—Earliest large sweet corn, very sweet and tender, the best second early sort for the market garden. Quart, 20c; peck, \$1.00; bushel, \$3.50.

Black Mexican—When ready for use is pure white, but the ripe grain is black, the sweetest variety and best for home garden. Quart, 20c; peck, \$1.10; bushel, \$4.00.

Early Minnesota—Popular old variety. Quart, 20c; peck, \$1.00; bushel, \$3.50.

Perry's Hybride—Matures a little later than Early Minnesota, ears large. Quart, 20c; peck, \$1.00; bushel, \$3.50.

Early Evergreen—Nearly two weeks earlier than Stowell's Evergreen, ears large and best quality. Quart, 20c; peck, \$1.00; bushel, \$3.50.

Country Gentleman—Large ears, small cob, well covered with long slender kernels, the sweetest of all corn. Quart, 25c; peck, \$1.20; bushel, \$4.00.

Stowell's Evergreen—The largest ears and the sweetest corn, and is the standard main crop variety. Quart, 20c; peck, 90c; bushel, \$3.25.

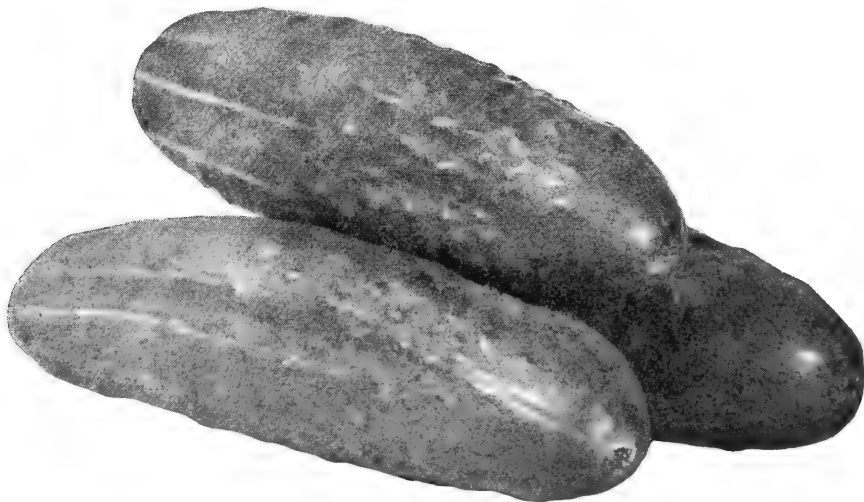
CUCUMBERS.

Plant in hills 4 to 6 feet apart, with 8 to 10 seeds in a hill, cover half an inch deep. When plants are out of danger of insects thin to 3 or 4 plants in a hill. For pickles plant from June 1st to August 1st. One ounce of seed will plant fifty hills. One pound per acre.



The Davis Perfect—This cucumber was originated by Mr. Eugene Davis, the well known greenhouse man of this city, the originator of the Grand Rapids Forcing Lettuce and the Davis Kidney Wax Bean.

The Davis Perfect is the greatest novelty in cucumbers that has been introduced for years. Slim and symmetrical with an average length of ten to twelve inches. Color, dark glossy green. They never grow pussy and hold their color and brittleness long after being cut. The seeds are very soft when the cucumbers is fit for the table, quality unequalled and enormously productive whether grown under glass or out doors. A sure money maker for all those engaged in cucumber growing and unquestionably the best for the home garden. Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 80c.



Chicago Pickle—Medium size, pointed both ends, spines very prominent, color deep green, very prolific. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Arlington White Spine—Long, symmetrical, color deep green. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Peerless White Spine—Larger than the Improved White Spine and more prolific. Medium vine, fruit about 6 inches long, $2\frac{1}{2}$ inches in diameter, deep green with white spines. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Long Green—Large vine, fruit large and long, green, ripening yellow. Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 80c.

Nichol's Medium Green—Excellent cucumbers for pickles, color dark green, fresh, crisp and prolific, and always straight, smooth and handsome. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Early Frame—Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Jersey Pickle—Sixty days to make pickles. Productive. Color dark green, holds color well when picked. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Snow's Pickle—Said to be far superior to any market pickle grown. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Rawson's Forcing White Spine—The best for green-house cucumbers. The fruit grows very even in size and regular in form, color dark green with light spines running from the blossom end. Ounce, 30c; $\frac{1}{4}$ -lb., \$1.00; 1-lb., \$3.50.

Early Cluster—Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Boston Pickling—A medium long variety, color dark green. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Gherkin—A very small oval variety, prickly and quite distinct from all others. Ounce, 15c; $\frac{1}{4}$ -lb., 40c; 1-lb., \$1.50.



CRESS.

Extra Curled—Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 50c.

EGG PLANT.



Culture—Sow in hot-beds or a green-house in March or early in April. The seed is very slow to germinate and requires a good deal of heat. Transplant to the open ground about June 1, in rows 2 or 3 feet apart each way. Egg Plant requires a rich warm soil. One ounce to 4,000 plants. Four ounces to an acre.

New York Purple—Very large and smooth, a fine dark color. Ounce, 30c; $\frac{1}{4}$ -lb., \$1.00; 1-lb., \$3.60.

Black Beauty—Earlier than the New York Purple, fruit large and handsome, skin a rich glossy, purplish black. Very prolific. Ounce, 30c; $\frac{1}{4}$ -lb., \$1.00; 1-lb., \$3.60.

ENDIVE.

Its leaves make a splendid salad when properly blanched. It is usually grown for fall use and sown in June and July. One-quarter ounce to 100 feet of drill. Four and one-half pounds to an acre.

Moss Curled—Green, extra curled, very ornamental. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Green Curled—A large growing plant which by tying up may be made to form finely blanched centers of good quality. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Broad Leaved Batavian—Large Summer variety. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

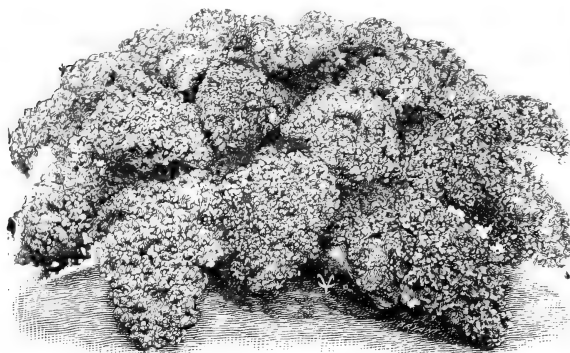
KALE, OR BORECOLE.

The leaves are used principally for greens, also for garnishing. Kale is more hardy than cabbage and makes excellent greens for fall and winter use and is improved by frost. For fall use sow in May or June in rich light soil in rows two or three feet apart and thin to two feet apart in the rows. It is better not to

handle the plants while frozen, but if unavoidable thaw out in cold water. One ounce to three thousand plants.

Tall Green Curled—Grows to three or four feet high, bearing long plume-like, light green leaves deeply cut, finely curled at edges. Very ornamental and hardy. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 50c.

Dwarf Green Curled—Plant low and compact but with large leaves, curled, cut and crimped until the whole plant looks like a bunch of moss. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 50c.

**KOHL RABI.**

The edible part is the turnip-shaped bulb grown above the ground. It is tender and excellent when used before fully grown, combining the flavor of turnip and cabbage. Seed should be sown in light, rich ground as early in the spring as possible in rows 18 inches apart and when well established thin to six inches apart in the row. Plant the latter part of July for fall use. One ounce of seed to two hundred feet of drill.

Early White Vienna—Extremely early with very small tops. Bulbs of medium size, very light green or nearly white and of the best quality. Ounce, 20c; $\frac{1}{4}$ -lb., 50c; 1-lb., \$1.75.

LETTUCE.

Culture—Sow in drills $\frac{1}{4}$ inch deep and 18 inches apart. Thin to 12 inches on all head varieties. For a constant supply sow every two weeks from the middle of April to July. One ounce of seed makes 2,500 plants.



Prize Head—Leaves are large, crimped, bright green tinged with brownish red. Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 90c.

Hanson—Very large heading variety. Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 90c.

Big Boston—A very popular market gardener's sort, the plants are large, hardy, leaves smooth, thin, light green in color. Indoors this forms a solid head, a less distinctly head variety when grown outside. Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 90c.

Black Seeded Butter—Large, smooth leaved, solid heading lettuce, inner leaves beautifully blanched and very tender. Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 90c.

Deacon—Forms very solid heads, the leaves blanching a beautiful rich yellow. Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 90c.

Grand Rapids Forcing—This grand forcing variety, originated by Mr. Eugene Davis, of Grand Rapids, has been of more benefit to green-house men than any variety known, in fact it has made the green-house business what it is to-day. It will stand more neglect in the way of watering and ventilation, and grow more weight on the same amount of ground and stand longer after maturity than the Black Seeded Simpson or any other sort and will keep from



wilting longer after being exposed for sale. Our stock of Grand Rapids lettuce is exceptionally fine, has been tested and we guarantee it to be all right. We shall never sell any of this variety until it has been tested and we can fully warrant it. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Early Curled Silesia—Crisp and tender, large blistered crumpled leaves, color very light green. Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 80c.

Black Seeded Simpson—Early, leaves large, thin and tender, growing in large loose clusters. Good for forcing or growing out of doors for the early market. Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 80c.

Premium Cabbage—Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 90c.

New May King—Heads 6 to 7 inches in diameter with outer leaves very closely folded in. Heads of clear light green, outer leaves brown, inner being clear bright yellow with pink. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

LEEK.

Culture—Sow early in rows 18 inches apart. When 4 inches high, thin to 4 inches apart. One-third ounce to 100 feet of drill.

Large Musselburg—Large showy variety. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Broad Scotch—Very hardy and rapid grower. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

MUSHROOM SPAWN.

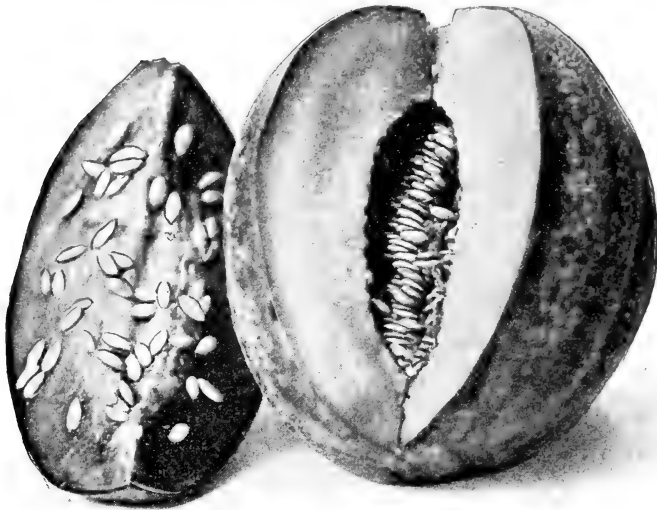
Culture—Take fresh horse manure and use nothing but the fine portion of it, shaking out the straw. Mix this with fresh loam, one part loam and two parts manure, and turn every day to keep from burning until the fiery heat is nearly all out of it. Prepare the bed about four feet wide and as long as required. Put in the preparation about eight inches deep, making it very solid. Let it remain in this condition until the temperature has been reduced to eighty degrees. Make holes two or three inches deep, into which put the spawn in pieces about as large as an egg and at a distance of twelve inches apart each way, cover the spawn and let it remain for eight or ten days, then cover the whole bed with fine loam to the depth of two inches, making it firm with the back of a shovel or spade. The bed must be in a covered situation and the prepared soil kept dry

from the commencement, with the temperature about 50 degrees. After the bed has been spawned do not water unless quite dry and when necessary luke-warm water. The bed will continue bearing from twenty to thirty days. After the first crop is gathered spread over the bed an inch of fresh soil and moisten with warm water. One pound of spawn is sufficient for a bed 2 by 6 feet.

Fresh Mushroom Spawn, 1-lb., 15c; 10-lb., \$1.25.

MUSKMELLON.

Culture—Melons require a rich sandy soil. Seed should be planted when the ground becomes warm, in hills 6 feet apart. Well rotted manure should be thoroughly mixed with the soil in each hill. Put from 6 to 10 seeds in each hill and when danger from insects is past, leave only three or four of the strongest plants. One ounce to 100 hills, 1 to 3 pounds per acre.



Davis White Seed Muskmelon—Ten days earlier than any other salmon-fleshed melon, very prolific. Flesh very sweet and solid and ripens to the rind, the seed cavity is exceedingly small. The fruit grows uniform in size, and the vine is big and strong with large thick leaves, protecting the small fruit from the sun and is not subject to blight or any other disease. The greatest muskmelon introduced since the Osage. Ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

Rocky Ford—An improved Netted Gem melon, very sweet. Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 80c.

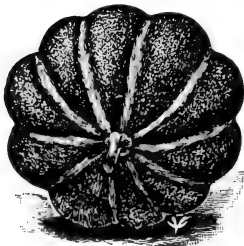
Grand Rapids Early Market—Very early, large, yellow, good seller on account of earliness, size and keeping quality. Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 90c.

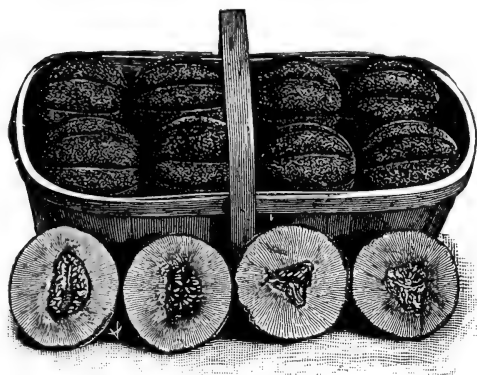
Jenny Lind—Small, early, light, green flesh, very sweet. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Extra Early Green Nutmeg—Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Emerald Gem—Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

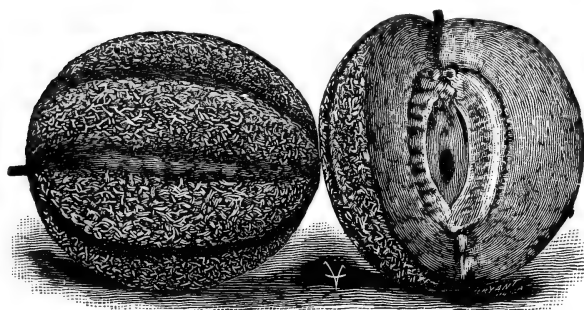
Pineapple—Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 80c.





Paul Rose—For a shipping trade as a basket melon this new melon is unequalled, flesh yellow, very sweet and spicy. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., 90c.

Tip Top—Melons round. Well ribbed. Average 7 inches in diameter. Flesh quite thick, bright salmon color, very sweet. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., 90c.



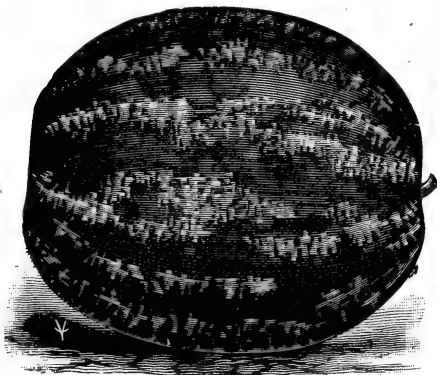
Osage—A medium to large sized musk melon. Vines vigorous and productive. The fruits are oval, dark green in color, slightly ribbed and partly covered with shallow silvery gray netting. The flesh is salmon colored, very thick, fine grained, very highly flavored, sweet and delicious. There is a great demand for the Osage from hotels and restaurants. The Michigan grown Osage musk

melon is becoming as well known as the Rocky Ford, and the shipping demand for these melons is increasing every year. Our stock seed is carefully grown and the seed saved only from perfect melons, and is absolutely pure and of the best type, with very small seed cavity. Ounce, 25c; $\frac{1}{4}$ -lb., 75c; 1-lb., \$2.50.

Osage—Grown from stock seed. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., 90c.

WATERMELON.

Culture—Watermelons require a warm, sandy soil. Mix well rotted manure well with the soil in each hill. Hills should be 8 to 10 feet apart, plant 8 to 10 seeds in each hill and thin to 3 strong plants when danger from insects is past. Four ounces to 100 hills. One to two pounds per acre.



Cole's Early—The best early melon for the home market. Flesh very sweet and delicious, rind very thin and brittle. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Triumph—Melons of enormous size, very sweet, a good shipper. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 50c.

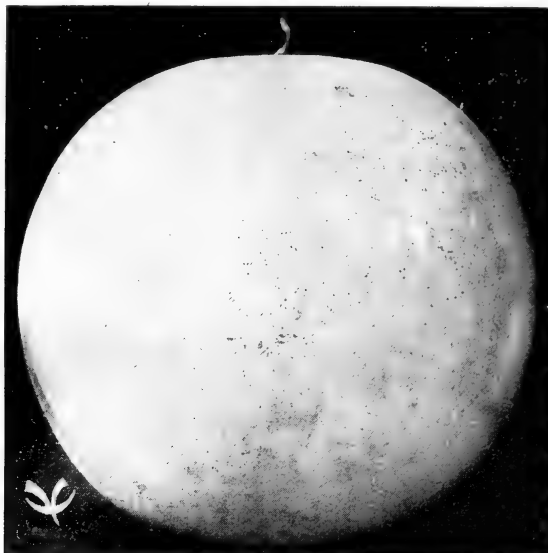
Vick's Early—Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Georgia Rattlesnake—Very large, long, smooth and distinctly striped, flesh bright scarlet. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Monte Cristo or Kleckley's Sweet—Large, oblong, skin dark green, flesh bright scarlet, sweet and sugary, rind very thin. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Mountain Sweet—Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Winter Water Melon—This new variety originated in Grand Rapids. It is earlier than the Sweetheart. Very prolific, the flesh is red and almost as firm as citron, very brittle and deliciously sweet. Its color is very light green, almost



white. The firmness of flesh causes it to be the longest keeper of the melon family. Placed in a cool dry cellar it will keep long into the winter its deliciousness and flavor. Ounce, 20c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.



Hungarian Honey—Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Citron—For preserving. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Black Spanish—Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Light Icing—Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Phinney's Early—Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Sweetheart—Early, vine vigorous and productive, fruit large, rind thin but tough, flesh red, very sweet and tender. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Dixie—Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

McIver's Wonderful Sugar—A large, handsome, oblong melon. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

ONIONS. A FEW NOTES ON ONION GROWING.

Start Right—Get good seed and good tools and use a first-class fertilizer. A good plan in applying the fertilizer is to use one hundred pounds to every pound of seed sown. This will make your onions "bottom up" well.

Don't try to grow more onions than you can properly care for. It costs more to grow a poor crop than it does a good one. Better have a few acres of first-class onions than many acres of unsalable stock.

In Seeding. It is usually conceded that five pounds of seed per acre of the Red or Yellow onions makes an ideal seeding. In sowing White Globe seed six or seven pounds produces a more desirable white onion. Sow your seed as early in the spring as possible, using a good seed drill and in rows thirteen to fourteen

inches apart. Keep the weeds down with a good hand cultivator between the rows and with your fingers in the rows.

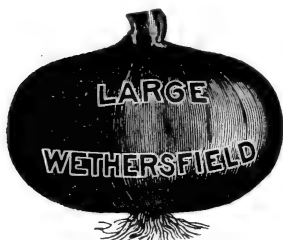
In Harvesting. When the tops die down and your crop has matured pull the onions out of the soil, throwing them into windrows, and allow them to dry out for a couple of days when the tops should be removed and the onions placed in bushel crates and stacked up in the field for a few days, or until well dried out, taking care to cover the onions in the top, or exposed crate, with grass or onion tops to keep the sun and rain out. When the onions have cured they should be lightly screened to remove any remaining soil or loose skins and then stored under cover of a shed or well ventilated barn until sold or such time as desired to put into winter storage.

In Marketing. Remember that there are "fashions" in onions as there are in spring bonnets, and an onion that will give the best of satisfaction in one market may fall entirely in another. As a rule the Eastern markets prefer a small or medium sized onion and one of yellow or white color. Your larger onions will do better in the West or South. New York prefers a white onion as the South does a red onion.

A good crop of onions is 500 bushels per acre, though it is no unusual thing to see an occasional crop running 1,000 to 1,200 bushels.

Early Fat Red—A medium sized early variety and of uniform size and shape.

Good keeper, desirable for early market. Ounce, 10c; $\frac{1}{4}$ -lb., 35c; 1-lb., \$1.00.



Large Red Wethersfield—Large size, slightly flattened, skin deep purplish red, good keeper and yields immense crop. Ounce, 15c; $\frac{1}{4}$ -lb., 35c; 1-lb., \$1.25.

Southport Red Globe—One of the very best main crop onions. There is always a good demand for red globes. The skin is dark glossy red. Onion fine grained, mild, tender, and good quality, a long keeper and large cropper. Ounce, 20c; $\frac{1}{4}$ -lb., 40c; 1-lb., \$1.40.

Michigan Yellow Globe—Ounce, 15c; $\frac{1}{4}$ -lb., 35c; 1-lb., \$1.25.

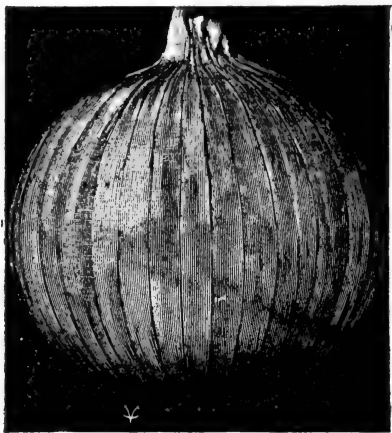


Yellow Globe Danvers—Best variety for the Eastern market. Splendid keeper, early, medium size and very handsome. Ounce, 15c; $\frac{1}{4}$ -lb., 35c; 1-lb., \$1.25.

Philadelphia Silver Skin or Portugal—Large white onion, grows a beautiful, firm, pearly white set. Ounce, 20c; $\frac{1}{4}$ -lb., 50c; 1-lb., \$1.75.

Southport Yellow Globe—Large, skin a fine deep yellow, keeps well. Ounce, 15c; $\frac{1}{4}$ -lb., 40c; 1-lb., \$1.30.





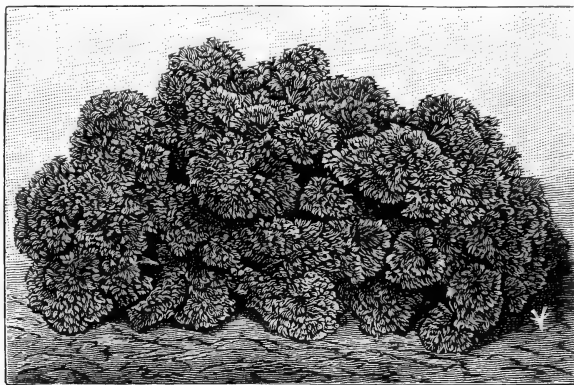
Prizetaker or Mammoth Yellow Spanish
—Large size, globular in form, light straw yellow skin; largest of all onions. Ounce, 15c; $\frac{1}{4}$ -lb., 35c; 1-lb., \$1.20.

Southport Large White Globe—Large, solid and handsome. Ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$1.90.

New Queen—Early, very white skinned, small, especially valuable for pickling. Ounce, 15c; $\frac{1}{4}$ -lb., 40c; 1-lb., \$1.50.

PARSLEY.

Culture—As the seed requires three or four weeks to germinate, sow early in the spring in rows one foot apart, cover half an inch deep. Thin to 5 or 6 inches apart or transplant. One ounce to 150 feet of drill.



Champion Moss Curled—Densely crimped or curled; dark green leaves. Ounce 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Triple Curled—Fine curled and a stronger grower than Champion Moss Curled. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

PARSNIPS.

Culture—Sow as early in the spring as possible in drills 15 inches apart and half an inch deep, in rich, well manured land. Thin to 6 inches apart in the rows. One ounce of seed to 200 feet of drill. Three to five pounds per acre.

Hollow Crown—White, very tender, with smooth, clean skin. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Long White Dutch or Sugar—Roots very long, white, smooth, and tender. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

PEAS.

Last season was a very productive year for Garden Peas, therefore we have a good supply of all varieties, especially those of the Telephone type, like Telephone, Prince Edward and Alderman, and the price is correspondingly lower. Our peas were grown in Idaho under irrigation and the quality is far superior to any we

have ever sold before. The mountain valleys of the northwest have a perfect climate for the growing of peas. As they are grown in rows and cultivated they are more easily raised and we can expect purer and better developed stock. We wish to call the market gardeners' attention to the new varieties of half Dwarf Peas. The Laxtonian destined to replace the Gradus and the Dwarf Defiance and Potlatch, maturing about the same time as the Telephone.

Culture—For extra peas plant very early on light rich soil. For a general crop a deep loam inclining to clay would be better. When grown for market they are seldom brushed but sown in single rows one inch apart and three to five inches deep, depending on the soil, time of planting and variety. Rows should be from 18 inches to 3 feet apart. Wrinkled varieties are not as hardy as the smooth hard sorts and if planted early should have dry soil and not be planted deep as they are liable to rot. Seed pea growers report the shortest crop for peas for many years and the crop is especially short on market garden varieties, such as Alaska, Gradus, Telephone, Alderman and Duke of Albany. Therefore prices will have to run very high this season. One quart to 100 feet of drill. One to three bushels per acre.

Velocity—The earliest pea grown. Five days earlier than Alaska or First and Best. Grows vines about two feet high. Wonderful bearer. Peas good quality. Quart, 25c; peck, \$1.40; bushel, \$5.00.

First and Best—Very early, popular for market and shipping. Ounce, 25c; peck, \$1.60; bushel, \$6.00.



Gradus—From the market gardeners' standpoint too much can not be said in praise of the Gradus or Prosperity. It is very early, being but a few days later than the extra early sorts. Pods very large, from 4 to 4½ inches in length, peas large and sweet. The vine has heavy stems with large dark green leaves and grows from 2½ to 3 feet high. Crop short, will have but a limited quantity. Quart, 30c; peck, \$2.25; bushel, \$8.00.

Laxtonian—One of the earliest dwarf peas. Vines are vigorous. Growing about 18 inches high, well covered with large even-sized pods averaging nine to ten peas in a pod. Quality of the best. Earlier than the Gradus and a better bearer. Supply limited. Quart, 50c; peck, \$3.50.

Notts' Excelsior — Best early dwarf wrinkled pea. More prolific than the American Wonder. Quality just as good. Quart, 25c; peck, \$1.75; bushel, \$6.50.

American Wonder—The earliest of the dwarf wrinkled varieties. Vines about 8 or 9 inches high, covered with well filled pods containing very large, sweet, tender and well flavored peas. Quart, 25c; peck, \$1.75; bushel, \$6.50.

Alaska—The earliest and most prolific pea. This beautiful blue pea is the most popular with the market gardeners. Quart, 25c; peck, \$1.50; bushel, \$5.50.

Little Gem—A nearly dwarf wrinkled variety; when green, peas are very large and of delicious flavor. Quart, 25c; peck, \$1.75; bushel, \$6.50.

Dwarf Defiance—A new second early sort. Vine grows about eighteen inches tall. Pods very long straight, dark green, with large peas of good flavor. Very productive, superior to the Old Pride of the Market. Quart, 30c; peck, \$2.25; bushel, \$8.00.

Pollatch—The market gardener has long been looking for this type of pea. Vines dwarf, very strong thick stalks of even growth twenty to twenty-four inches high. Luxuriant dark foliage bearing pods medium green in color, $3\frac{1}{2}$ to 4 inches in length, broad and pointed at the ends, well filled with large green peas. Enormous bearer. Fit for the table in sixty days from planting. Quart, 40c; peck, \$2.25; bushel, \$8.00.

Little Marvel—Another grand new pea far superior to the popular American Wonder. Nott's Excelsior or Little Gem, vines of dwarf even growth, averaging 15 inches in height and are heavily set with good sized pods well filled with six to seven large deep green peas. Little early, great bearer. One of the best for the home garden. Quart, 30c; peck, \$2.00; bushel, \$7.00.



Sutton's Excelsior—Something new. Of the Notts' Excelsior type but pods much larger, and said to be best dwarf wrinkled peas grown. Quart, 25c; peck, \$1.75; bushel, \$6.50.

Champion of England—Height 4 to 5 feet. Very productive and admitted to be the richest and best flavored peas grown. Quart, 25c; peck, \$1.75; bushel, \$6.00.

Telephone—Large wrinkled peas, vines grow to about 3 feet in height, pods very long, and light green; main market sort. Quart, 25c; peck, \$1.60; bushel, \$6.00.

Prince Edward—A new pea of the Telephone type, fully as early as the Telephone if not earlier. Pods very long, dark green, of excellent quality and very prolific. Pods are as long as the Alderman or Duke of Albany. We have only a few of these peas to offer this year as this is the first year they have been on the market and the crop is very short. Quart, 25c; peck, \$1.75; bushel, \$6.00.

Improved Stratagem—Vines eighteen inches in height and very stocky, pods long, well filled with large peas. Quart, 25c; peck, \$1.75; bushel, \$6.00.

Large White Marrowfats—Quart, 20c; peck, \$1.30; bushel, \$4.00.

Black Eyed Marrowfats—Quart, 20c; peck, \$1.30; bushel, \$4.00.

Alderman—A new pea of the Telephone type. Vines from 4 to 5 feet in height. Very vigorous. More productive than either Telephone or Duke of Albany. Pods long dark green. Peas very large and well flavored. One of the most profitable peas for the market gardeners. Quart, 25c; peck, \$1.75; bushel, \$6.50.

PEPPER.

Culture—Pepper should be started in a hot-bed or cold frame, and transplanted about the first of May in rows about two feet apart each way.



Ruby King—Four and one-half inches to six inches long, mild, one of the best for stuffed pickles. Ounce, 20c; ¼-lb., 60c; 1-lb., \$2.00.

Sweet Mountain—Very productive, flesh thick, sweet and mild. Ounce, 20c; ¼-lb., 60c; 1-lb., \$2.00.

Cherry Red—Small round rich scarlet. Very hot. Ounce, 20c; ¼-lb., 60c; 1-lb., \$2.00.

Large Bell or Bull Nose—An early variety of mild flavor, rind thick and fleshy, one of the best for stuffed pickles. Ounce, 20c; ¼-lb., 50c; 1-lb., \$1.50.

Chinese Giant—This new pepper is the best and largest mango pepper ever introduced, plant strong, bushy, prolific bearer. Fruit mammoth size, glossy red flesh and mild flavor. Ounce, 30c; ¼-lb., \$1.00; 1-lb., \$3.50.

Long Red Cayenne—Ounce, 20c; ¼-lb., 60c; 1-lb., \$2.00.



PUMPKIN.

Culture—One pint to 100 hills. One or two pounds per acre.

Large Cheese or Kentucky Field—Popular for family use, flat shape. Ounce, 5c; ¼-lb., 15c; 1-lb., 40c.

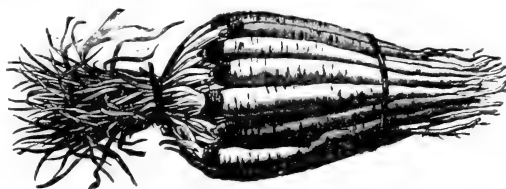
Quaker Pie—Nearly oval, cream colored, best quality. Ounce, 5c; ¼-lb., 15c; 1-lb., 40c.

Small Sugar—Orange color. Flesh very sweet. Ounce, 5c; ¼-lb., 15c; 1-lb., 40c.

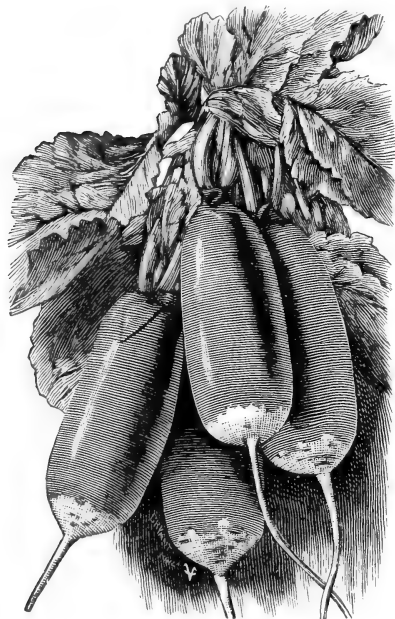
Common Yellow or Connecticut Field—Immensely productive, very hardy. Good either for pies or stock feeding. Ounce, 5c; ¼-lb., 10c; 1-lb., 25c.

SALSIFY OR VEGETABLE OYSTER.

Culture—Salsify does the best on light rich soil. Sow early in drills 18 inches apart, cover seed about 2 inches. Thin to 4 or 5 inches. One ounce to 100 feet of drill. Five to eight pounds per acre.



Mammoth Sandwich Island—This is a large strong growing plant, very smooth. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

RADISH.

Culture—Radish thrive best on light, sandy soil. Sow as soon as the soil can be worked in the spring, in drills, cover about half an inch deep. For a succession, sow every two weeks. One ounce to 100 feet of drill, Eight to ten pounds per acre.

French Breakfast—Olive shaped, red, tipped with white. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 50c.

Long Scarlet Short Top—Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 50c.

Early Scarlet Turnip—Very early, small round, good quality. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 40c.

Long White Vienna or Lady Finger—One of the best white radishes. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 50c.

Fireball—Vick's Globe type of radish. Tops are smaller; bulb a little flatter but round. Color deep red. On account of the small tops it is an excellent forcing radish. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Vick's Scarlet Globe—One of the best for forcing on account of the small tops, attractive color, does not soon become pithy, very early, equally as good for sowing outdoors. Our seed is exceptionally good this year. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Wood's Early Frame—One of the best early long scarlet radishes. Very smooth and handsome. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 50c.

Crimson Giant—Double the size of the ordinary turnip shaped radishes. Remain firm when very large. Flesh white, of mild flavor. Ounce, 5c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Chartier—Large, long summer radish, scarlet, white tipped. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 50c.



Scarlet Turnip, White Tip—One of the earliest turnip shaped radishes. Very handsome, good flavor. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 50c.

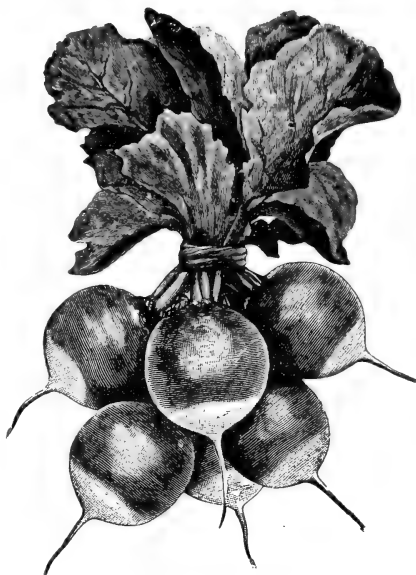
Giant White Stuttgart—A mammoth white summer radish. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 50c.

Chinese Rose or Scarlet China—Bright rose colored, one of the best for fall and winter use, flesh white and firm. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 50c.

Long Black Spanish—A long winter radish, black skin, white flesh. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 50c.

Round Black Spanish—Round black winter radish. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 50c.

Icicle—A new long white variety. Very mild and crisp. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 50c.



SQUASH.

Culture—Plant as soon as the ground is warm and danger from frost is over. Plant in hills 5 feet apart for bush varieties and 6 to 8 feet for the running kind. Six to eight seeds per hill and thin to three plants. One ounce to 40 hills, about two pounds per acre.

Fall and Winter Squash.

Boston Marrow—Bright orange, good for autumn use. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

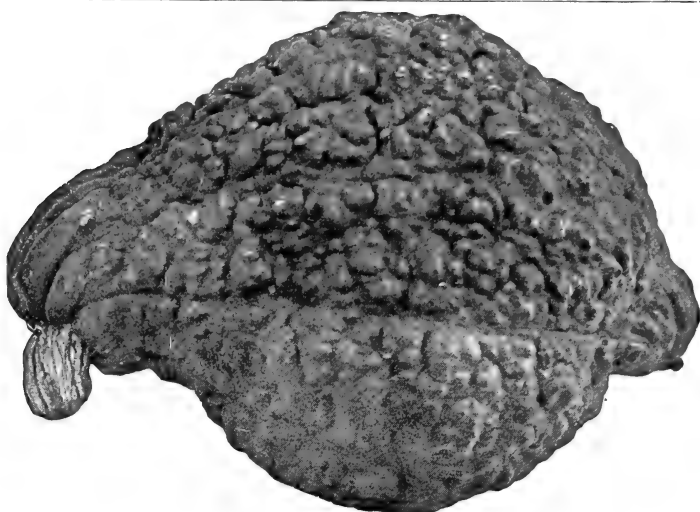
Mammoth Chili—Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Hubbard—The old favorite winter sort. Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 85c.

Chicago Warted Hubbard—Much larger and more warted than the old Hubbard. Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 90c.



Delicious—This new squash has all the good qualities of the Hubbard when it first originated. Squash is not large, but the quality is unsurpassed. Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 90c.



Sibley or Pike's Peak—Large oval fruit, tapering at the bottom end, skin dark olive green, light golden flesh, excellent quality. Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 90c.

Summer Varieties.

White Bush Scallop—Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 50c.

Mammoth White Bush—Twice the size of the above. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 70c.

Yellow Bush Scallop—Orange color. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 50c.

Mammoth Yellow Bush—Large yellow, very early. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 50c.

Summer Crookneck—The old standard variety, very early. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 50c.

Giant Summer Crookneck—Very large. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 50c.

SPINACH.

Culture—For spring use sow in drills one foot apart and for succession sow every two weeks. For winter use, sow in September. One ounce for 100 feet of drill. Eight to ten pounds per acre.

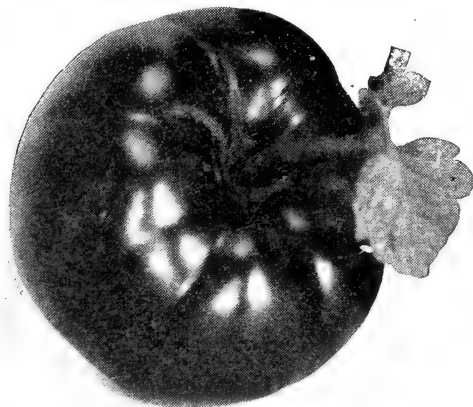
Thick Leaved—Large dark green leaves, the most popular variety for the market. Ounce, 5c; $\frac{1}{4}$ -lb., 10c; 1-lb., 15c.

Bloomsdale or Savoy Leaved—Ounce, 5c; $\frac{1}{4}$ -lb., 10c; 1-lb., 15c.

Long Standing—Ounce, 5c; $\frac{1}{4}$ -lb., 10c; 1-lb., 15c.

New Victoria—Dark black-green leaves, splendid for spring sowing. Ounce, 5c; $\frac{1}{4}$ -lb., 10c; 1-lb., 15c.

TOMATOES.



Culture—For early fruit the seed should be sown in a hot-bed about the first of March, sow either in drills or broadcast, cover about half an inch, late sowings may be made until the last of April. When the plants are two or three inches high they should be double rooted into a small box, and not more than 100 in a box, or into small pots, one plant to a pot. Water freely when transplanted and expose to the sun gradually until the plants are hardened. Set outdoors when danger from frost is over. One ounce of seed to 2,500 plants. About two ounces per acre.

Earliana Earliest—Ounce, 25c;

$\frac{1}{4}$ -lb., 75c; 1-lb., \$2.50.

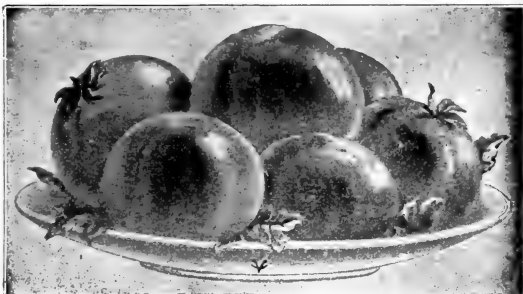
Livingston's Dwarf Stone—

This new variety from Livingston's resembles the Dwarf Champion in habit of vine but is of stronger growth and more erect, the fruit resembling Livingston's Stone in color, shape and size. The new Dwarf Stone is nearly double the size of the Dwarf Champion, yet equally as early and more prolific. Ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.25.

Dwarf Champion—Very early, fruit a bright pink, smooth and regular. Ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

Acme—Fruit smooth, color purple. Ounce, 15c; $\frac{1}{4}$ -lb., 50c; 1-lb., \$1.75.

Yellow Plum—Ounce, 20c; $\frac{1}{4}$ -lb., 75c; 1-lb., \$2.50.



New Globe—Fruit is globe shaped, color a fine glossy rose, tinged with purple. The fruit is large, smooth, flesh firm with few seeds. Quality the very best. In Grand Rapids this variety has been used more for forcing than outdoor growing. Ounce, 25c; $\frac{1}{4}$ -lb., 75c; 1-lb., \$2.50.

Livingston's Perfection — Large, very solid flesh, color blood red. Earlier than the Stone. Splendid canning variety. Ounce, 20c; $\frac{1}{4}$ -lb., 50c; 1-lb., \$1.75.

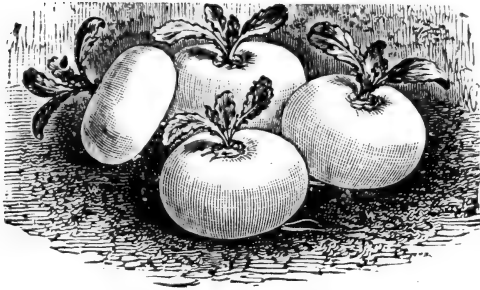
Matchless—A large, bright red tomato, very solid and meaty. Containing but few seeds, and of excellent flavor. Vines make strong growth and are very productive. Ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

Stone—The best type of the large, smooth, solid tomatoes. Color fine scarlet, core small and most prolific bearer. The main crop tomato. Ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

Chalk's Early Jewel — Heavy cropper, large, solid, bright scarlet fruit. Medium early. Ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.



TURNIP.



Culture—For early crop, sow in latter part of April, for fall and main crop the middle of June until the last of August. One ounce to 250 feet of drill. One pound per acre.

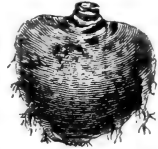
New White Milan—Very early, white, best for bunching. Ounce, 10c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.

Purple Top Strap Leaf—The well known popular variety for family or market use. Large, flat, white, purplish above ground, flesh fine grained. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 40c.

Danish Bortfelder—A new Danish Turnip, the most productive of all turnips and is considered the best in Scandinavia. Long root. Cream color, delicate green tops, rapid grower, heavy cropper and long keeper. Must be sown in the spring for summer use and in the middle of the summer for winter purposes. Try it. Ounce, 10c.

White Sweet Russian—Large, white, very desirable for either stock or table use. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 40c.

Sweet German—Flesh hard, white and firm. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 40c.



White Egg—Very handsome, good early or late turnips for the market. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 40c.

Purple Top White Globe—Very productive and handsome. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 40c.

Cow Horn—Good stock turnip, heavy cropper. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 40c.

Large White Norfolk—Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 40c.

Yellow Aberdeen—Globe shaped, very large, good stock turnip. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 40c.

Robertson's Golden Ball—One of the sweetest yellow turnips, flesh hard and firm, good keeper. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 40c.

Amber Globe—One of the best yellow varieties for field crop for stock. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 40c.

RUTABAGA.

Culture—Sow from the middle of June to the middle of July.

American Purple Top—Very hardy and productive, flesh yellow, sweet and solid. Good for stock and table use. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 35c.

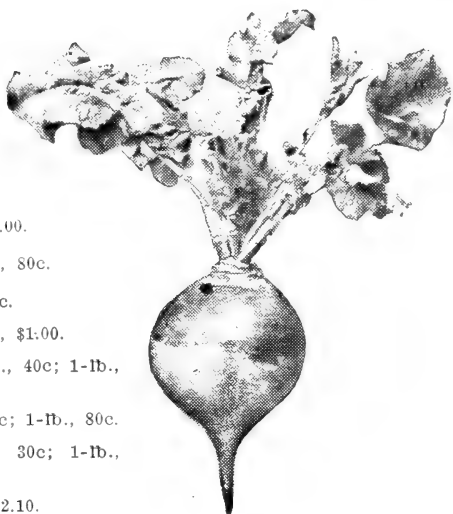
White Sweet Russian—Large, white, very desirable for either stock or table use. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 40c.

Bangholm—Oblong globular shaped with very small neck, yellow flesh, very dark purple top. Quality superior to all other swedes and very heavy cropper. Ounce, 5c; $\frac{1}{4}$ -lb., 20c; 1-lb., 60c.



HERBS.

- Annis—Ounce, 15c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.
 Caraway—Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 80c.
 Dill—Ounce, 10c; $\frac{1}{4}$ -lb., 15c; 1-lb., 50c.
 Lavender—Ounce, 15c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.
 Sage—Broad leaved. Ounce, 10c; $\frac{1}{4}$ -lb., 40c; 1-lb., \$1.25.
 Summer Savory—Ounce, 10c; $\frac{1}{4}$ -lb., 25c; 1-lb., 80c.
 Sweet Marjoram—Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.
 Thyme—Ounce, 25c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.10.



MISCELLANEOUS SEEDS.

Owing to market changes on field and grass seeds we are unable to give prices herewith and when customers are in need of anything in this line will be pleased to quote lowest prices the market will justify.

BUCKWHEAT.

Culture—Buckwheat should be sown about the middle of June. From one to three pecks per acre.

Japanese—The earliest and most productive variety grown, grains very large.

Silver Hull—Good yielder, grain small, of a light gray color, very thin hull and yields the most flour per bushel.

BARLEY.

Common—Six-rowed succeeds best on sandy loam. Sow about $2\frac{1}{2}$ bushels per acre.

MILLET.

Common—Requires a light dry rich soil and grows $2\frac{1}{2}$ to 3 feet high with a fine bulk of stalks and leaves. Sow broadcast from May 1st to August 1st, from one peck to one-half bushel per acre.

German or Golden—Grows much larger than common millet, the heads are very large and compact. Sow about one-half bushel per acre.

Hungarian—A species of annual millet growing less rank with smaller stalks, makes better hay for horses than millet. Sow from one peck to one-half bushel per acre.

RAPE.

Dwarf Essex—Especially valuable for green manuring and for pasture. When pastured off by sheep it will do more to restore exhausted land than any other plant. There is no forage plant that will produce so heavy a yield with such slight cost. Sow from the time frost is out of ground to July. It is ready in about six weeks. Three to four pounds per acre.

RYE.

Spring Rye—The principal value of this grain is as a catch crop to sow where winter grains have failed. The straw is shorter and stiffer than the winter variety while the grain though smaller is of equal value.

SAND OR WINTER VETCH.

For forage and fertilizing purposes, it succeeds and produces good crops on poor, sandy soils as well as on good lands, growing to a height of 4 to 5 feet. It is perfectly hardy through the United States, remaining green all winter. If sown in the Spring, it can be sown alone or mixed with oats, Spring rye or barley. If sown during August or September, Winter rye serves as a good support. The root growth is very extensive from the beginning, and makes quantities of nitrogen tubercles, thus giving it very valuable fertilizing properties. Sow 3 to 5 pounds per acre, with one-half bushel rye, oats or barley.

SORGHUM.

Sorghum—The early varieties of sorghum are sown quite extensively for forage crops. Stalks are tall and leafy and when well cured make splendid fodder for cows. Cane seed should not be sown until the weather is warm. About three or four pounds per acre.

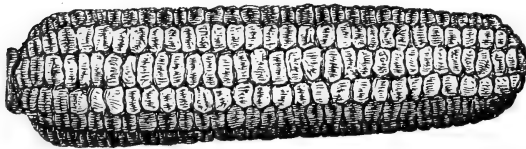
FIELD PEAS.

Canada Field Peas—Make splendid hay for hogs when sown with oats. They can be fed either green or dry. Plowed under as a fertilizer they are nearly as good as clover and can be grown on land too poor for clover. Sow about 2 bushels per acre or if sown with oats, sow 1 bushel of each. Sow peas broadcast first and plow under four or five inches deep, then sow oats on top and harrow in. Crop very short. Prices will be high.

SUNFLOWER.

Mammoth Russian—This variety has large heads and a good crop will produce 1,000 pounds of seed per acre. It is used for feeding poultry. Sow the seed at corn planting time in rows 5 feet apart and 10 inches apart in the rows.

SEED CORN.



Pickett Dent—This corn has been grown by Mr. Pickett for the past 20 years and has never failed in having a good crop of well matured corn. The stalks are of medium size, ears of fair size, rows of kernels run very regular, tips and butts well filled. Kernels long, cob small. This corn wins well at the corn shows.

Leaning Fodder Corn—A big yellow Dent variety. Especially good for silage corn.

Red Cob Ensilage—Big white corn, lots of leaves, great yielder.

GRASS SEED.

Timothy, orchard grass, blue grass, red top, mammoth, medium, alsyke and alfalfa clover at lowest prices market warrants.

Kentucky Blue Grass—The base of all lawn mixtures. It makes a grand sward, but takes longer than the lawn mixtures to get established. Fancy, cleaned seed, per pound, 30c.

BOKHARA, OR SWEET CLOVER.

This variety of clover resembles alfalfa, as to appearance and habit of growth when young. It makes a very vigorous and rapid growth, often 4 to 6 feet high, its feeding value is not great on account of the amount of tannin, giving it a bitter taste, but of all the legumes it is the greatest nitrogen gatherer. Its greatest value other than a fertilizer is in preparing the soil for alfalfa as the bacteria of sweet clover and of alfalfa is the same. Sweet clover will thrive on all kinds of soil and will inoculate soils too poor to establish alfalfa. It is also a great honey gatherer and makes splendid bee pasture.

ALFALFA OR LUCERNE.

Alfalfa is being more generally grown every year as experience is teaching our farmers the soils to which it is best adapted, and better methods of seeding. Its great value as a hay crop has been thoroughly demonstrated by actual trials on the sandy loams of Michigan. Three crops can be cut in one season, and alfalfa hay is one per cent. higher in protein than clover. Alfalfa hay is a balanced ration for growing stock, and there is no better green feed for winter feeding of poultry than short cut alfalfa.

Alfalfa does the best on deep sandy loam. The ground should be plowed early in the spring and harrowed or disked frequently, especially after every rain until the last of May or first of June, then sow about 20 pounds to the acre. Sown broadcast. Harrow lightly.

TURKISH ALFALFA.

Hardier than alfalfa, will resist drought much better and will stand colder weather. Equally as heavy a yielder and quality as good. It is given much better results in Michigan.

**LAWN GRASS.**

One pound to 600 square feet. Three to five bushels per acre.

Red Top—For quick results Red Top is unequalled as it comes up quickly and makes a nice thick lawn, but it does not last. Fancy seed. Per pound, 20c.

White Dutch Clover—Many prefer a white clover lawn to any other grass. Good seed. Per pound, 60c.

Hill Lawn Mixture—Especially adapted to light soils and shady situations. A thick velvety sod is very hard to grow on the light sandy soil of the hill residence district, but four years' actual use has demonstrated that the Hill Lawn Mixture will do better, last longer and grow thicker sod than any mixture on the market. Per pound, 35c; 5-lb., \$1.50.

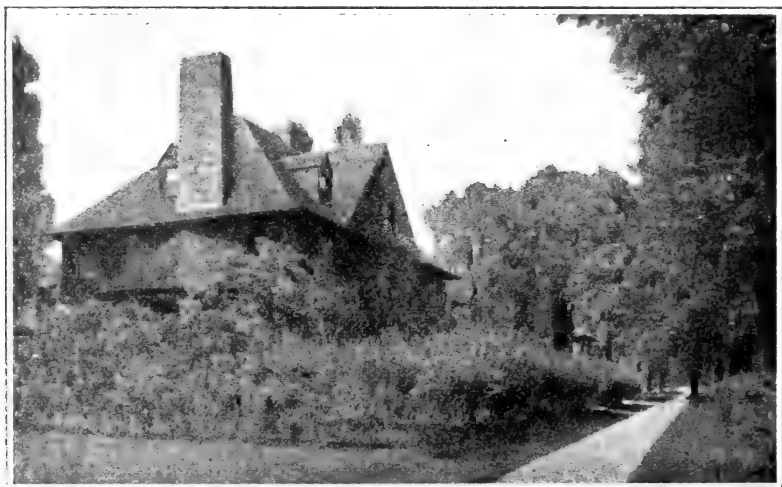
Chicago Park Lawn Mixture—It will produce an even, dense growth of permanent sward as early in the season as it is possible to do with seed. This mixture contains no annual grasses for making quick show to the detriment of a good lawn but only those of lasting value and hardness. Per pound, 35c; 5-lb., \$1.50.

THE PROPER CARE OF LAWNS.

If about to make a new lawn much care must be given to the proper preparation of the soil. The ground should be ploughed or spaded and thoroughly worked from 6 to 12 inches in depth so that the grass roots will have ample opportunity to take deep hold and not dry out in baking hot days of summer. A liberal application of either pulverized sheep manure or cattle manure, (sheep manure preferable) should be incorporated with the soil before sowing seed. An application of bone meal and wood ashes or bone meal and muriate of potash should be raked into the surface thoroughly. Then, on a calm day, sow the seed thickly and after raking it in roll well several times with a good hand roller until the surface is perfectly firm and smooth. Lawns made in this manner are ready for use almost as soon as a lawn made from sod and the results from seed are far better.

For lawns already seeded the most important work is done in the early spring days after the freezing weather is over. The frosts of winter expand the soil about the grass roots and hold them in icy embrace until the spring sunshine brings a thaw. The contraction which always takes place when ice melts allows the ground to settle away from the grass roots and leaves them practically exposed to the air where they will die, if not brought into contact with the soil again at the time growth begins.

The alternate thawing and freezing of early spring weather is most disastrous in its effects on fine lawns unless something is done to counteract it. Therefore, the lawn should be rolled with a heavy roller, so as to press into contact with the soil the grass roots heaved out by the frost. By repeated rollings in the spring the lawn is made firm and smooth and growth starts from an even surface. After this the lawn should be gone over with a fine rake, stirring up the soil on any bare spots and removing the dead grass and dried leaves left over from the



previous season. Then grass seed of the finest mixture should be sown evenly over the newly raked sod and rolled in. This will cover the seed just enough to promote successful germination and a smooth thick sward will result.

After weeding a lawn it should also be thoroughly rolled. When lawns are troubled with moles they may be exterminated by the use of traps or by squirting a little Lawn Ant Destroyer, called Dethant into the runways. The fumes of Dethant will pass all through the runways and destroy all animal or insect life. Where ants are troublesome, make a hole in the nests and pour a little Dethant in and cover with dirt and it will kill all insects in the nest.

FLOWER SEEDS

ASTERS.



The secret of success in growing flowers is to pulverize the soil fine, and make rich with well rotted manure. Don't sow seeds out of doors too early, wait until the ground is warm. Cover seeds no deeper than directed; pack the earth firmly over them, keep the ground moist until up, afterwards water each day as needed, at sun down.

ABRUS PRECATORIUS—Twelve feet in height. Beautiful prayer beads. Seeds resemble coral beads, may be used for necklaces. Soak seed in warm water before sowing. Packet, 5c; ounce, 15c.

ACHILLEA, THE PEARL—Three feet. Covered with heads of pure white, double flowers, from spring until frost. Useful for cut flowers. Sow seed early. Packet, 10c.

ADLUMIA CIRRHOSA OR ALLEGHENY VINE—The foliage is leathery like the Maidenhair Fern. Flowers tube-shaped, delicate rose, pink and white, and cover the plant. Very desirable for covering trellises. Packet, 10c.

AGERATUM—Half hardy annual, of easy culture; grows well in any good soil. Flowers freely the whole season; potted and taken into the house in the fall, it will continue flowering through the winter. Delicate blue, useful for bouquet making. For a bed plants should be set about a foot apart. For winter flowering take up the plants least advanced. Cover seeds 1-16 of an inch deep.

Narrum Blue Perfection—Nine inches. The darkest Ageratum. Packet, 5c.

Imperial Dwarf Blue—Six inches. Good for ribbon border. Packet, 5c.

Imperial Dwarf White—Packet, 5c. Mixed, packet, 5c.

ALYSSUM, SWEET—Used for edging or rock work, also in the house for winter or early spring flowers, are esteemed for bouquets on account of fragrance. Sow in the open border as soon as it is warm enough, and thin out the plants as early as they can be handled, carefully trim out the seed pods and old flower stems after each flowering and they will continue to bloom through the whole season. Hardy annual. Cover seeds 1-16 of an inch deep. Ounce, 25c; packet, 5c.

Little Gem—Plants only a few inches high, grow very dense and are completely covered with snow white flowers giving the impression of a beautiful carpet. Ounce, 45c; packet, 10c.

AMARANTHUS—*Candatus* (Love lies bleeding), *Salicifolius* (Fountain plant) *Gordonii* (Ornamental Foliage plant). Seed may be sown in the open ground in the garden as soon as the ground can be worked in the spring, or in a hot bed about a month before settled warm weather, when the plants are of suitable size transplant to 20 inches apart. Fine mixed, packet, 5c.

ANEMONE, WIND FLOWER—Very pleasing hardy plants for the herbaceous border. Flowers very large and beautiful. Fine for bouquets. Packet, 10c.

ANTIRRHINUM, OR SNAP DRAGON—Very showy perennial of easy culture, producing an abundance of fine flowers of brilliant colors, flowering freely from seed the first season and generally the second and third. Seed may be sown in the open border of glass. Cover 1-16 inch. Packet, 10c.

Album, White—Per packet, 5c.

Queen Victoria—Three feet. The best tall growing white. Packet, 10c.

Luteum, Golden King—Packet, 10c.

Lovely White Rose with pink lip. Packet, 10c.

Delicata—Daybreak pink. Packet, 10c.

Coral Red—Packet, 10c.

Special Mixture—Packet, 15c.

AQUILEGIA (Columbine) Hardy perennials; they are the honeysuckle style of flowers; some double and others single and of various colors, border plants of easiest culture. Come into flower early in the spring; suitable of beds, rockeries. Height about two feet. Sow seed in the garden where wanted to stand, or in a seed bed and transplant. Flowers second season.

Chrysantha—Three feet. Golden yellow, long spurred. Packet, 10c.

Chrysantha Grandiflora Alba—Three feet. White spurred columbine. Large flowering, pure white, long spurs. Packet, 10c.

Coerulea, Rocky Mountain Columbine—Three feet. One of the most beautiful of our native flowers. Sepals deep blue, petals white. Packet, 10c.

ARISTOLOCHIA SIPHO—DUTCHMAN'S PIPE—Thirty feet. Vigorous large leaved climber. Flowers very curious pipe shaped. Packet, 10c.



ASTERS—By gradual selection this grand old favorite now blooms from early summer until frost and the varieties run through all the colors and of all sizes for flowers and height of stem. Sow either in the open ground in May or in cold frames in March or April, covering the seed with about $\frac{1}{4}$ inch of good soil. When the plants are strong enough transplant about 18 inches apart in beds.

Vaughan's Snowball.—The best dwarf white Aster. The beautiful shape of the snow white flowers and the free flowering habit of the plants are unequalled in any other dwarf aster. Packet, 15c.

Vaughan's Fireball—The most brilliant dwarf aster. Flowers of beautiful shape and of the brightest scarlet. Very effective for borders or for pots. Packet, 15c.

Dwarf Chrysanthemum Aster—In size of flowers and habit of growth, this surpasses nearly all other dwarf varieties. The flowers are full, Chrysanthemum-shaped, and produced in clusters or bouquets from fifteen to twenty and even more in a truss. Very useful for edgings, beds, and for pot culture. Height 9 to 12 inches. White, changing to rose, rose crimson, light blue and white, light blue, white, dark blue (purple). All colors mixed. Each of above, packet, 10c; ounce, \$2.00.

Branching or Simple Aster—A magnificent American strain producing double flowers on stems. Plants grow from 2 to 3 feet in height. Excellent for early cut flowers in the fall. White, dark red, daybreak pink, lavender, rose pink and purple. Per packet 10c. Giant branching, choice mixed, packets, 10c. Each of the above per ounce, \$2.00.

Hohenzollern Aster—Plant tall-growing, branching and bearing on very long stems, flowers of mammoth size. Unequalled as a cut flower. White, pink, brilliant rose, crimson, silvery lilac and light blue. Hohenzollern, many colors mixed. Each of the above, packets, 10c; ounce, \$2.00.

Giant Comet Aster—Surpassing all comet asters in the enormous size of their well formed fine double flowers and the height of growth. Each individual flower is borne on a stiff stem and resembles an exquisitely curled Japanese Chrysanthemum. The Bride, white turning to pink, crimson, sulphur yellow, lavender, light blue and dark blue. Giant Comet, all colors mixed. Each of the above packets 10c; ounce, \$1.50.

Florists' Mixture of Asters—This is a mixture of all the best varieties of asters suitable for cut flowers. Colors, white, pink and brightest red, with a small proportion of light blue and purple with some intermediate shades. Contains only the most salable colors for cut flowers used. Per packet, 10c.

Truffaut's Peony Flowered—Flowers very large, brilliant colors, perfectly double, petals beautifully incurved, height 22 inches; many colors mixed. Per packet, 5c.

White Asters in Mixture—This mixture contains Giant Comet, Victoria, Truffaut, Carlson, Boston, Florists, Vaughan's New Upright White, Simple's Branching and others. Per packet, 5c.

Excelsior Mixture of Tall Asters—Per packet, 5c.

Carlson or Invincible—Twenty-four inch. The Early Branching Aster. The flowers are large and firm, the stems long and stiff, and the colors are decided and pleasing. About ten days earlier than the Grant Branching Asters. Colors, white, daybreak pink, rose pink, lavender, violet blue. Each per packet, 10c.

All Colors Mixed—Per packet, 10c.

BACHELOR'S BUTTON—A very hardy annual of the easiest culture, succeeding well in any good garden soil. They produce a fine effect planted in groups or masses. The flowers, in great variety of colors, borne on long slender stems, are very useful in bouquet making. Plants should stand about one foot apart. Cover seed one-eighth of an inch. Packet, 5c.

BALSAM or LADY SLIPPER—Strong growing half hardy annuals, producing fine, large, double rose like flowers of various colors, mottled, etc., in great profusion. Of easy culture. Two feet high. Double German Mixed. Sow seed in frame, or sheltered part of the garden, and when three inches high transplant to fifteen inches apart. Give plenty of room. Needs rich soil.

Double Camellia Flowered—Per packet 5c.

Double Flesh Pink—Per packet, 5c.

Double Camellia Flowered—Per packet, 5c.

Double Rose Flowered—Per packet, 5c.

Balsam Apple and Pear Mixed—Very curious rapid and dense climbers with ornamental foliage and golden yellow fruit, which open when ripe, showing the seed and the blood red interior. Per packet, 5c.

BALLOON VINE or LOVE IN A PUFF—Ten feet. Flowers in light soil. One of the prettiest climbers. Flowers, white. Per packet, 5c.

BRACHYCOME, or SWAN RIVER DAISY—A beautiful little plant, fern-like foliage and handsome flowers. Fine for cut flowers. Height six to eight inches. Sow in house or open ground. Plants should be set about six inches apart. Good for edging. Cover seed one-eighth of an inch. Per packet, 5c.

BELLIS or DOUBLE DAISY—A low growing spring flowering plant. Loves a shady place. Will bloom for years if undisturbed. Per packet, 5c.

COXCOMB—The Coxcomb are tender, requiring good soil. Mixed. Per packet, 5c.

CALLIOPSIS or COREOPSIS—Will bloom until frost, thrives on any soil and requires but little care. Per packet, 5c.

CALENDULA (Pot Marigold)—One of the easiest grown plants. Hardy annual, giving a fine effect in beds and mixed borders; blooms all the time. Height eighteen inches. Fine double mixed. Contains all the choice sorts. Per packet, 5c.

Orange King—Color rich dark orange. Per packet, 5c.

CANNAS—Will bloom the first summer from seed if sown early. Soak the seed in warm water until they begin to swell; then sow them in a box in a sunny window. When up to the second leaf, transplant singly into pots and set out in the garden when the weather is warm. Crozy's best mixed. Per packet, 10c.

CANTERBURY BELLS—Very effective and handsome border plants, succeeding best in light rich soil. Being biennials, seed should be sown every spring in order to have flowers each season. Sow either in frames or open ground. Plants should be set eighteen inches apart. Cover seed 1-16 inch.

Single Mixed—Per packet, 5c.

Double Mixed—Per packet, 5c.

Carpatica Hairbell—Nine inches, blue. Per packet, 5c.

CANARY BIRD VINE—Twenty feet. Clean handsome foliage, with an abundance of bright yellow flowers, good Rambler and fine for stumps and roots. Excellent window vine for winter. Per packet, 5c.

CANDYTUFT—Hardy, will grow anywhere and flower all summer. Fine for borders.

GIANT HYACINTH—Flowers white, 1 foot. Flowers very large. Per packet, 5c.

Queen of Italy—Eight inch. Dwarf plant. Flowers pink and very large. Per packet, 5c.

All colors and types mixed. Per packet, 5c.

Sempervirens—Pure white. Per packet, 5c.

CARNATION—The Carnation is the finest perennial herbaceous plant extant. The flowers are large, of delicious fragrance, and of the most brilliant and beautiful colors. Sow seed in frame or seed bed, either in the spring or early in the fall, and transplant to 15 inches apart in a rich, light soil. The plants require slight protection through the winter.

Dwarf Margaret Mixed—Per packet, 10c.

Margaret Mixed, All Colors—Per packet, 10c.

CENTAUREA—Vaughan's Grant Sweet Sultan, two and one-half feet. String bushy plants. Flowers fragrant, very large, ranging in colors from pure white through pink to purple mixed. Per packet, 5c.

CHRYSANTHEMUM—Annual varieties, showy and effective, favorite, grown extensively for cut flowers.

Coronarium—Double fine mixed. Per packet, 5c.

Perennial varieties of Chrysanthemum Shasta Daisy, two feet. Finest mixed. Per packet, 5c.

CINERARIA—Columbian Mixture. Contains all of the finest English, French and German strains. The flowers are very large, 7 to 9 inches in circumference and of the most beautiful colors. Per packet, 15c.

COBAEA SCANDENS—A fine rapid climber. Handsome foliage and large bell shape flowers. A well established plant will run about thirty feet in a season. tender perennial. Per packet, 5c.

COSMOS—A very effective autumn plant. Quite hardy and rapid growing. Should be started in March and transplanted to open ground about June first. Per packet, 5c.

Grant Mixed—Per packet, 10c.

Early Flowering Mixed—Per packet, 10c.

White—Per packet, 10c.

CYCLAMEN, ALPINE VIOLETS—A beautiful pot plant. Flowering from the seed the first year.

Grant Flowering—Ten seeds, 10c.

CYPRESS VINE—Ten feet. For training upon a light trellis. Blossoms are scarlet or white star shaped. Profuse bloomer. Mixed. Per packet, 5c.

DAHLIA—It is not generally known that Dahlias can be raised from seed, and will bloom the first year. Plant the seed in a shallow box of earth early in March or April, transplant them carefully when large enough and keep the soil moist. When all danger from frost is past, plant them in the bed or border in the garden.

Double Good Mixed—Per packet, 5c.

Single Giant Perfection, Mixed—Per packet, 5c.

DATURA ANGEL'S TRUMPET—Showy large branching plants bearing large trumpet shaped flowers.

Cornucopia—Three feet. Horn of Plenty. Per packet, 10c.

DELPHINIUM OR LARKSPUR—Annual. Sow seed in the open border either very early in the spring or late in the fall. As the seedlings grow, thin them from 6 to 18 inches apart.

Giant Hyacinth—Flowered, mixed, three feet. Per packet, 5c.

PERENNIAL LARKSPUR—The brilliant spikes of flowers are very striking.

Formosum—Three feet. Brilliant blue, white center. Per packet, 10c.

DIANTHUS OR PINKS

Barbatus Sweet William—One of the old fashioned flowers our grandmothers grew. Produce large head of sweet scented flowers. Hardy, easily grown and flowers the second year from seed.

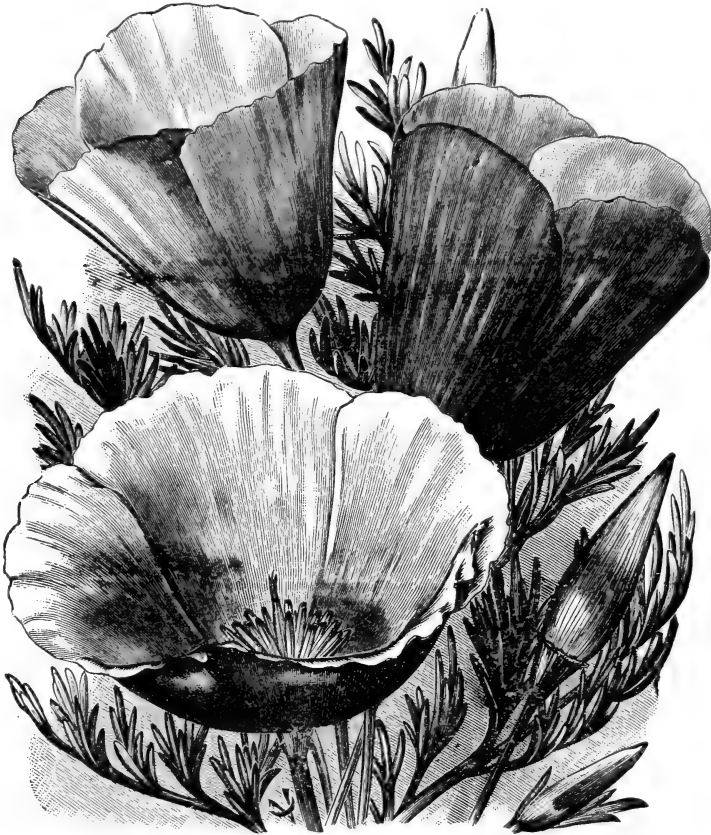
Mixed—Per packet, 5c.

Giant-Flowered Mixed—Per packet, 10c.

Single Mixed—Per packet, 5c.

Special Mixture—Contains all of the most beautiful varieties. Per packet, 25c.

Chinese and Japanese Pinks—A showy annual variety. One foot. Per packet, 5c.



CALIFORNIA POPPIES, The State Flower of California.

Chinese Double Mixed—Per packet, 5c.

Heddewigi Single Crimson Belle—Velvety dark red. Per packet, 5c.

Plumarius, Clove or Grass Pinks—10 in. A low growing, sweet scented, early blooming hardy garden pinks. Excellent for borders. Should be planted in sunny situations.

Single Mixed—Per packet, 5c.

DIGITALIS FOXGLOVE—Three feet to five feet. Handsome, hardy plants. Succeed well in poor soil if given partial shade. The thimble shaped flowers grow in long spikes.

Gloxinia Grandiflora, Alba—White. Per packet, 10c.

Rosea—Rose. Per packet, 10c.

Mixed—Per packet, 5c.

DOLICHOS, HYACINTH BEAN—A rapid growing annual climber. Flowers sweet scented. All colors mixed. Per packet, 5c.

Escholtzia—California poppy, hardy annual. California, the original yellow, per packet, 5c; all colors mixed, packet, 5c.

FEVERFEW—Three feet. Neat, small, double white flowers, well adapted for bedding and cutting.

Aba Plenissima—Per packet, 10c.

FORGET-ME-NOT—One half to one foot. Flourish most in moist shady situations.

Early and Late Flowering—Mixed. Per packet, 10.

FOUR O'CLOCK—Two feet. An old fashioned flower, bearing hundreds of blossoms during the season.

Longiflora Alba—Flowers white and very fragrant. Per packet, 5c.

GAILLARDIA (BLANKET FLOWER)—One and one half feet. Annual varieties. From early spring till late fall they produce great quantities red and yellow flowers. Sow in the open ground.

Double Perfection Mixed—Per packet, 5c.

Perennial Varieties—Two feet. The flowers are large, excellent for cutting and of the most brilliant shades of orange, crimson, scarlet and vermilion. Do best if treated as biennials.

Grandiflora Mixed—Per packet, 10c.

GODETA—One and one half feet. Flowers wide open, of satiny texture and delicate shades of color. Best in shade.

All colors and sorts mixed—Per packet, 5c.

GOURDS—Where a large growth of vine is required, there is nothing better than gourds. Many sorts will grow from twenty to thirty feet and the flowers are very handsome. The fruit of many kinds are very ornamental and often useful.

Calabash or Pipe Gourd—A native of South Africa. Used for making the celebrated Calabash Pipe. Per packet, 15c.

Dipper—Makes an excellent dipper. Per packet, 5c.

Japanese Nest Egg—Per packet, 5c.
All varieties mixed.

GYPSOPHILA—ANGEL'S BREATH—Two feet. Several sowings should be made during the season to keep up a supply.

Elegans Grandiflora Alba—This is an improved large flowering pure white form of the annual Angel's Breath. Per packet, 5c.

HELIOTROPE—Two feet. Fragrant flowers of rich purple blue. The flowers and leaves have a mossy effect. Blooms from seed the first summer if sown early.

Mammoth Mixed—Per packet, 10c.

HIBISCUS—Four feet. Blooms from seed the first year, bears immense flowers often seven inches in diameter, and one plant will often have as many as fifty blossoms.

Golden Bowl—Deep cream with a maroon center. Per packet, 10c.

HOLLYHOCK—Five feet. Perennial plants of stately growth, which will flower from seed the first year. Should be sprayed with Bordeaux Mixture as soon as leaves show above the ground and continuously during the season to prevent rust.

Prize Mixture—Finest shades and perfect double flowers. Per packet, 10c.

HUMULUS, JAPANESE HOP—Twenty feet. One of the most rapid growing ornamental climbers, green leaved. Per packet, 5c.

Variegated Japanese Hop—Foliage beautifully variegated, splashed and streaked with white. Per packet, 5c.

IPOMOEA MOON-VINE—Twenty feet. Beautiful rapid annual climbers. Many of the sorts open only when the sun rises, others when the sun sets, some are fragrant. Seed should be soaked in warm water 24 hours before sowing. The seed should be notched with a file before soaking.

Mexicana Grandiflora Albe—White moon-flower covered with large white flowers every evening or cloudy day. Sow seed and transplant. Per packet, 10c.

Mexicana Grandiflower—Pink. Soft lilac pink flowers. Per packet, 10c.

JAPANESE MORNING GLORY—Much larger flowers than the common Morning Glory, and greater variety of colors.

Special Mixture—Per packet, 10c.

COMMON MORNING GLORY—All colors mixed. Per packet, 5c.

JOB'S TEARS—Used for making necklaces and rosaries. Oz. 5c; 1-4 lb., 15c. lb., 50c.

KOCHIA TRICOPHYLLA—Two and one-half feet. Summer Cypress or Burning Bush. Forms dense bushes of cypress appearance. During the summer they remain light green, but turn to crimson or blood red in the early fall. Per packet, 5c.

LANTANA HYBRIDE—Two feet. Shrubby plant. Verbena-like flowers of white, red and yellow colors. Per packet, 5c.

LATHYRUS LATIFOLIUS—Eight feet. Perennial Sweet Peas. Bloom through the season. Are hardy and will live for years.

Mixed—Per packet, 5c.

LOBELIA ERINUS—Flower from seed the first year.

Speciosa—Dark blue. Good for hanging baskets. Per packet, 5c.

Pumila Sylandins—Dwarf, best for bedding. Flowers deep purplish violet with white eye. Per packet, 10c.

LYCHNIS CHALCEDONICA—Two feet. Burning Star. Flowers fiery red, grow in clusters each blossom forming a perfect maltese cross. Will bloom from seed the first year. Per packet, 10c.

MARIGOLD—Free flowering annuals of easy culture.

Eldorado—Four feet. Large double flowers of yellow shades. Per packet, 5c.

Tall African Mixed—Large double flowers. Per packet, 5c.

Tall French Mixed—Large bushes covered with a multitude of small flowers. Per packet, 5c.

Legion of Honor—Ten inches. Single flowers rich golden yellow, marked with brown. Best for edging. Per packet, 5c.

MIGNONETTE—Six to twelve inches. Flowers grow in large fragrant spikes. Excellent for cutting and combining with other flowers in bouquets.

Gabriele—Very sweet, spikes thick, one of the best for out-door culture. Per packet, 5c.

Grandiflora—Large flower. Per packet, 5c.

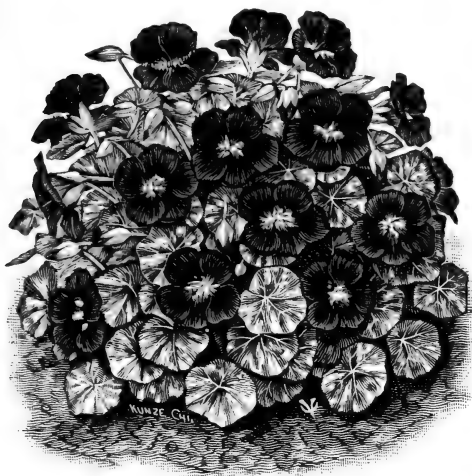
Marchet—Blooms the entire season, the flowers lasting till late in the fall. Per packet, 5c.

NICOTIANA AFFINIS—Two feet. Sweet Scented Tobacco Plant. Produces large pure white flowers of delicious fragrance. If taken up in the fall and cut back and potted they will bloom all winter. Per packet, 5c.

NIGELLA—Love in the Mist—One and one half feet. A compact, free flowering plant with finely cut foliage, curious looking seed pods.

Blue and White Mixed—Per packet, 5c.

Miss Jackyll—Long stemmed flowers of clear cornflower blue. Per packet, 10c.



NASTURTIIUMS.

- Dwarf Nasturtiums**—Hardy annual about one foot high; culture easy; mixed, all colors. Per packet, 5c; per ounce, 10c.
- Beauty**—Scarlet splashed canary. Per packet, 5c; oz., 10c.
- Chameleon**—Bearing flowers of quite distinct colors on the same plant. Per packet, 5c; oz., 10c.
- Empress of India**—Dark leaves, Crimson flowers. Per packet, 5c; oz. 10c.
- King Theodore**—Velvety red flowers. Per packet, 5c; oz., 10c.
- Vesuvius**—Salmon rose. Per packet 5c; oz., 10c.
- Special mixture of dwarf Nasturtiums.** Per packet 5c; oz. 15c.

Black Prince—Velvety black flowers. Per packet, 5c; oz. 10c.

Jupiter—Large, rich golden yellow flowers. Per packet, 5c; oz., 10c.

Margerite—Cream, scarlet spotted flowers. Per packet, 5c; oz., 10c.

Vichow (Rose Queen)—The best pink. Per packet 5c; oz., 10c.

Madam Gunther's Hybrids—Five to seven feet, very strong grower, with rich dark foliage, flowers have a wide range of most beautiful colors. Per packet, 5c; per ounce, 10c.

PANSY.

PANSIES—Do best in rich moist soil and a cool moist atmosphere. A situation sheltered from high winds and close to the morning sun is most favorable. All colors mixed. Per packet, 5c; per ounce, 50c.

Giant Pansy Mixture—This mixture includes all the richest reds, coppers and bronzes together with the most delicate rose and pink shading. All the distinct colors of Trimardeau, the splendid Cassier strain, with its delicate veinings. Per packet, 10c; per ounce, \$2.50.

Fiery Faces (Fire King)—Rich scarlet with gold edge and yellow center. Per packet, 10c.

Lord Beaconsfield—Purple and lavender, shading to white near the top. Per packet, 10c.

White, with Eye—Pure white with violet blotch on the three lower petals. Per packet, 10c.

Yellow, With Eye—Clear yellow, heavily blotched on lower petals. Per packet, 10c.

Masterpiece—Crimped and curled in such a fashion they appear double. Per packet, 10c.

Vaughan's International Pansies—The world's best. This is a combination of as many separate colors, types, blendings and unique kinds as can be found in the world. Per packet, 15c; per ounce, \$15.00.

PETUNIA—Tender annual. Seeds may be sown in the open ground when the weather becomes settled.

Small Flowering Varieties:

Howard's Star—Regular white star-like stripes on old rose background. Per packet, 10c.

Finest Mixed—Per packet, 10c.

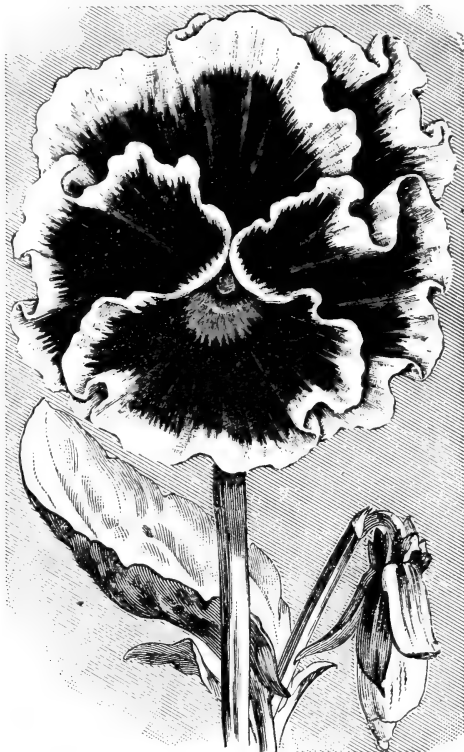
Snowball—Pure white. Per packet, 10c.

Large flowering varieties:

Giants of California—Mixed. Flowers very large, of all shades. Per packet, 10c.

Vaughan's Best Mixture of large flowering and single Petunias. Per packet, 10c.

PANSY.



Vaughan's Mixture of Double Petunias. Only a certain percentage of double petunias will come double. This mixture will produce from 20 to 30 per cent of doubles while the rest will be large flowering. The weaker seedlings should be saved as they produce the finest double flowers. Per packet, 25c.

PHLOX DRUMMONDI—*Grandiflora*, one foot. Hardy annuals of easy growth. Bloom from June to October.

Alba—Pure white. Per packet, 5c.

Coccinea—Fiery scarlet. Per packet, 5c.

Isabellina—Yellow. Per packet, 5c.

Rosea—Pink. Per packet, 5c.

Splendid Mixture—Per packet, 10c.

Cuspidata Mixed, Star of Quedlinbury. Mixture of star shaped flowers. Per packet, 5c.

Dwarf Phlox—Eight inches. Fine for ribbon bedding or borders. Plants low, bushy, covered with flowers. Mixed. Per packet, 10c.

Phlox Decussatu—Three feet. Perennial Phlox, seed germinates very slowly often requiring five or six months. Mixed. Per packet, 10c.

POPPIES.

POPPY—Sow the seed as early in the spring as the ground can be worked; cover lightly.

Single Annual Sorts, two feet:

English Scarlet Field—Per packet, 5c.

Shirley—Silk or Ghost Mixed. Per packet, 5c.

Double Annual Sorts:

Giant Double Pure White—Per packet, 10c.

Giant Double Pink—Per packet, 10c.

Giant Double Cardinal Red—Per packet, 10c.

Carnation Flowered Double Mixed—Per packet, 5c.

Perennial Poppies:

Iceland Poppies—Single, mixed. The delicate flowers are fragrant, and the long stems make them suitable for cutting, half hardy perennial. Blooming the first year from seed, the seed should be planted early in boxes and transplanted. Per packet, 5c.

Oriental—Three feet. Oriental Poppies are showy perennials, with enormous scarlet flowers with purple centers. The leaf is long, deeply cut, and clothed with white bristly hairs. Per packet, 10c.

Oriental Hybrid—All shades from softest pink to deepest red. Per packet, 10c.



PORTULACA—ROSE MOSS—Six inches. Will bloom freely in hot dry situation, where almost any other plant would die. Easily transplanted. Sow in May when the ground is warm.

Single Mixed—Per packet, 5c.

Double Mixed—Per packet, 10c.

PRIMULA—CHINESE PRIMROSE—Eight inches. Charming winter flowering house plant. May be raised easily from seed.

Intrnational mixture—Contains all of the choicest colors of the single flowering Primulas. Per packet, 10c.

PUERARIA THUNBERGIANA—Fifty feet. Kudzu Vine, or Jack and the Bean Stalk. Flourishes where nothing else will grow. The large leaves of the brightest green make a dense shade. Per packet, 5c.

PYRETHRUM—Golden Feather, six inches. Good plant for edging on account of the beautiful yellow foliage. More successful treated as an annual.

Roseum Hybridum Grandiflower—Two and one half feet. The flowers of this strain grow very large, twelve inches in circumference, mixed. Per packet, 10c.



RICINUS—CASTOR BEAN—Zanzibariensis Mixed—Ten to twelve feet. The ornamental leaves are two and one half to four feet across. Each plant makes a perfect pyramid of foliage thickly set from top to bottom. Per packet, 5c; per ounce, 15c.

RUDBECKIA—CORNFLOWER—Two feet. Fine flowering annual forming a dense bush covered with bright flowers, borne on long stems. Per packet, 10c.

SALVIA.

SALVIA SPLENDENS—Scarlet Sage—Standard bedding plants. Most beautiful for hedges or border. Easily grown.

Fireball—One and one half feet. It has larger flowers and is more free flowering than any other kind. Very early. Per packet, 10c.

Clara Bedman or Bonfire—Two feet. The spikes grow erect and stand clear above the foliage. Per packet, 10c.

Drooping Spikes—Two and one-half feet. Flowers large, causing the spikes to droop by their own weight. Per packet, 10c.

SALVIA ARGENTEA—Silver Leafed Sage—Silvery foliage with small white flowers. Per packet, 5c.

SALIEGLOSIS—Two and one half feet. Attractive annual. The blossoms are tubes haped. Each flower is veined with a glint of gold. Grown easily from seed.

Emperor Mixed—Large flowering. Per packet, 5c.



SCABIOSA—Mourning Bride or Pincushion Plant. The flower stems are long and the blossoms keep well in water.

Mixed—Per packet, 5c.

STOCKS GILLIFLOWER—The flowers grow in long stiff stalks like small rosettes, and are very fragrant.

Dwarf German Mixed—Ten weeks, one foot. Per packet, 10c.

Giant Perfection, or Cut and Come Again—Useful for outdoor bedding as well as for pots or cut flowers. They throw out side branches. All bearing double and very fragrant flowers.

Mixed—One and one-half feet. Per packet, 10c.

Beauty of Nice—Two feet. Winter stock of quick growth. Flowers large. Mixed, per packet, 10c.

SWEET PEAS.



Culture—Early in spring make a trench about six inches deep in rich mellow soil; and plant the seed in the bottom, covering about two inches. When the plants are about five inches high gradually fill up the trench and furnish some support for the vines.

White.

- Blanch Burpee**—Vines of strong growth, flowers showy white on long stems. Per packet, 5c; ounce, 15c; $\frac{1}{4}$ -lb., 35c; 1-lb., \$1.25.
- Emily Henderson**—Pure white, earlier than the *Blanche Burpee*. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb. \$1.00.
- Sadie Burpee**—Black seed, flowers show a delicate pink flush when first opened. Very large. Per packet, 5c; ounce, 15c; $\frac{1}{4}$ -lb. 35c; 1-lb., \$1.25.
- Dorothy Eckford**—White seeded. The best pure white in existence. Is semi-hooded, of good form, with large wings, and very large standard. One-half larger than *Blanch Burpee*. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb. 30c; 1-lb., \$1.00.
- White Wonder**—Pure white; double. It frequently produces double stems with five to nine blossoms, fully half of the flowers being double, having two or three standards. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 35c; 1-lb., \$1.25.

Cream or Yellow.

- The Hon. Mrs. E. Kenyon**—Light primrose. Very large semi-hooded form; the latest and best of this shade. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.
- Marchioness of Cholmondeley**—Standard light salmon, buff and cream; wings are light buff, a little larger than medium, and a hooded form; about 25 per cent. of blossoms run off to open form of same shade. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Pink.

- Lovey**—Shell pink. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb. 30c; 1-lb., \$1.00.
- Katherine Tracy**—Soft rose pink, lighter at edges, large flower of strong growth, two on stem. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.
- Prima Donna**—Pure pink, self colored, over medium size, hooded form, vine very vigorous, and there are usually four blossoms to the stem. The best of the light pink varieties. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.
- Lady Mary Currie**—Orange pink shaded rose lilac. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.
- Janet Scott**—Clear deep bright pink, showing buff at the top of the standard, with the upper or top blossoms and the buds lighter pink and more buff. Large size and hooded form. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Pink and White.

- Blanch Ferry**—Bright rose pink, wings creamy white, tinted with pink. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.
- Bride of Niagara**—Double. Standard bright carmine rose. Wings white, usually tinged with pink. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Red and Scarlet.

- Salopian**—Flowers of large size, finely hooded, deep crimson. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.
- King Edward VII**—Bright red or crimson scarlet. Standard a little brighter than wings, very large size, open form. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.
- Fire-Fly**—Brilliant fiery scarlet. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Blue and White.

- Maid of Honor**—Beautifully shaded with light blue on white ground edged with deep violet. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.
- Phenomenal**—White shaded with lilac, very large, hooded, and lower blossom on stem is usually double, the petals are all delicate and wavy. Per packet, 5c; ounce, 15c; $\frac{1}{4}$ -lb., 35c; 1-lb., \$1.25.

Maroon.

- Shazada**—Intensely dark maroon with a tint of purple in inner portion of wings. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.
- Othello**—Very large, dark maroon, showing veins of almost black, hooded form. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.
- Mrs. Walter Wright**—Rose purple. Self colored. It changes to a slightly bluish purple as it fully matures, very large size, hooded form. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.
- Boreation**—Very dark crimson purple. Packet, 5c; oz., 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.
- Black Knight**—Standard wine-brown or dark claret; wings heavily shaded with brownish purple. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Striped and Variegated.

- American**—Striped with bright blood red on white ground, very showy. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.
- Aurora**—Flowers extra large, three on a stem, beautifully flaked with a bright orange salmon on a creamy white ground. Per packet, 5c; ounce 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Grey Friar—General effect is grey, heavily shadowed purple markings on creamy white ground. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Lottie Hutchins—Large flowers, delicately flaked and striped with light pink on creamy ground. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Senator—Purplish maroon striped on a white ground. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Princess of Wales—Standard purple, wings blue, both striped on white. Medium size; hooded form. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Lottie Eckford—Standard white, heavily shaded throughout with lilac, wings shaded and tinted with lighter lilac. Both standard and wings have a rim of very deep blue. Large size, hooded form; strongly inclined to double. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Red and White Striped—Packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Lavender and Blue.

Countess of Radnor—Large, light lavender with faint purple tinge. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Lady Grisel Hamilton—Standard mauve. Wings lavender, large size, hooded form, the largest and lightest shade of lavender. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Lottie Eckford—Large silvery-white flowers, beautifully shaded and edged with soft lavender. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Navy Blue—Deep indigo blue. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Mrs. Geo. Higginson, Jr.—Light lavender, almost azure blue, and nearly free from any tint of mauve; medium size, semi-hooded form. Ounce, 5c; $\frac{1}{4}$ -lb., 15c; 1-lb., 40c.

Lord Roseberry—Bright magenta rose, showing veins of deeper shade. Large size, hooded form. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Captain of the Blues—Purplish blue wings and lavender purple. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Emily Eckford—Flowers, large, light rosy purple or reddish mauve; wings blue. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Prize Mixture—This mixture contains the cream of the new standard sorts. It is made up entirely of new and separate colors, carefully proportioned as to its composition, there is no better mixture in existence. Per packet, 5c; ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

SPENCER VARIETIES.

Orchid-Flowered Sweet Peas—This type is distinguished from the standard sorts by the extraordinary size of their flowers and by the standard being crinkled and wavy. They usually bear four blossoms on a stem, and are easy to grow as the standard sorts.

Frank Dolby—Largest pale lavender. Per packet, 5c; ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

Enchantress—Clear pink. Per packet, 5c; ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

George Herbert—Rich rose carmine. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

John Ingham—Carmine-rose. Per packet, 5c; ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

Helen Lewis—Brilliant rose orange. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Florence Morris-Spencer—Delicate blue with pink margin. Per packet, 5c; ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

Countess Spencer—Delicate soft rose pink. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

Primrose Spencer—Large primrose. Ounce, 10c; $\frac{1}{4}$ -lb., 30c; 1-lb., \$1.00.

White Spencer—Pure white countess spencer, very large size. Per packet, 5c; ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

Gladys Unwin—Pale roes pink. Per packet, 5c; ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

Nora Unwin—A large white. Per packet, 5c; ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

Phyllis Unwin—Carmine. Per packet, 5c; ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

Spencer Mixture—This mixture is made up of all of the best Spencer and Unwin types. Grown separately and carefully compounded, and is not to be compared with mixtures grown together. Per packet, 5c; ounce, 20c; $\frac{1}{4}$ -lb., 60c; 1-lb., \$2.00.

THUNBERGRA ALATA—Black Eyed Susan—Five feet. Beautiful trailing for hanging baskets and lawn vases. Per packet, 5c.

VERBENA.

VERBENA—If sown in the open ground in May they will bloom in August, but if started in pots in the house in winter they will flower sooner. Seeds should be soaked in lukewarm water before planting, and care taken that the soil is rich. Verbenas can be grown from cuttings, but seedlings are more vigorous and produce more flowers.

Mammoth Types:

White—Per packet, 10c.

Mayflower Pink—Per packet, 10c.

Firefly—Intense red. Per packet, 10c.

Mammoth Mixed—Per packet, 10c.

VINCA ROSEA, Periwinkle—One foot. Ornamental free blooming plants. Seed should be sown early and the plants will bloom the first summer. They can be taken up in the fall like *Chrysanthemums*, potted and kept in bloom through the winter.

Mixed—Per packet, 5c.

VERINCA SPICATA—One and one half feet. An elegant hardy border plant bearing all summer. Long spikes of bright blue flowers. Per packet, 10c.

WILD CUCUMBERS—Very vigorous growing climber, flowers grow in spikes which have a peculiar sweetish fragrance. The seed is produced in round prickly seed pods. The seed is slow to germinate, should be planted in the fall. Vines will run from 15 to 20 feet. Per packet, 5c.

WILD FLOWER GARDEN—A mixture of easily grown annuals for the decorations of children's gardens, etc. Per packet, 5c; ounce, 10c; ¼-lb., 30c



ZINNIAS—Half hardy annual. Sow the seed early in the spring in open ground and transplant to one and one-half feet apart in good rich soil.

Double Grandiflora—Per packet, 5c.

Double Grandiflora—Per packet, 5c.

Mammoth Mixed—Per packet, 5c.

Mammoth Mixed—Per packet, 5c.

Golden Yellow—Per packet, 5c.

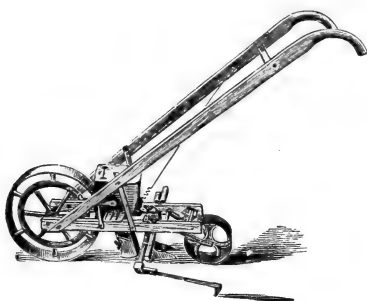
Flesh Color—Per packet, 5c.

Rose—Per packet, 5c.

Scarlet—Per packet, 5c.

Double Crested and Curled—Per packet, 5c.

Iron Age Farm and Garden Tools

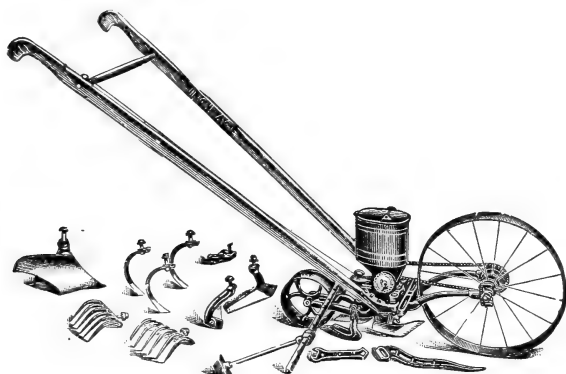


NEW MODEL SEED DRILL.

The best drill for market gardeners. The best value in material, durability and merit. Each drill tested, crated and carefully packed for shipment. Price, \$8.00.

No. 4 IRON AGE.

COMBINED DOUBLE WHEEL HOE DRILL SEEDER.



The most practical and complete tool on the market. Easy to adjust and operate, light and strong. Price, complete, \$10.00; as drill seeder, \$8.00.

No. 212 SOLID STEEL GARDEN TROWELS.



The blade of this trowel has the appearance of my No. 211, being nicely polished. This trowel is made of one piece of heavy sheet steel, the shank and blade being one piece. The shank is bent hollow to give strength. It is a good strong trowel for family use. Shank and adjoining part of blade are varnished blue. The blade is finely polished.

These trowels are made only in 6 inch size. Each, 20c.

No. 15.

COMBINED SINGLE WHEEL HOE, HILL AND DRILL SEEDER.



Will place the seed accurately either in the hill or drill. Price, as Hill Dropper Drill only, \$8.50

No. 18 Combined Single Wheel Hoe and Drill, similar to No. 47, without the hill dropping device. Price, \$11.00.

GEM OF THE GARDEN SINGLE WHEEL HOE.



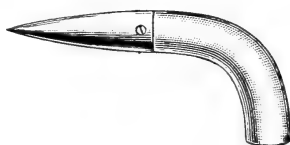
Gem Double Wheel Hoe	\$6.00
Gem of the Garden, Single Wheel Hoe	5.00
Iron Age Single Wheel Hoe, No. 20	6.00
Iron Age Single Wheel Hoe, hoes only	4.00
Iron Age Double Wheel Hoe	7.00
Iron Age Double Wheel Hoe, with side hoes only	4.50

No. 217 TRANSPLANTING TROWELS.



Size, 5 inch. The blade and shank of this transplanting trowel are made of one piece of heavy sheet steel, the shank being straight with blade. For many purposes this is better than the bent shank trowel, and answers for both trowel and dibble. The blade is narrow, and is deeply curved, which makes the trowel much better than one with an angle. This trowel has no superior as a weed digger, and for transplanting. It is unequalled for setting out cabbage, strawberry and tobacco plants. Excellent for lifting and setting out plants and tree seedlings. Each 15c.

WOOD HANDLE IRON DIBBLES.



Price, each, 25c.

No. 213 STEEL GARDEN TROWELS.



Size, 6 inch. These are made of fine cold rolled steel, bright blades, with malleable Iron Shanks, firmly riveted by a new method. The blades will not pull off the shanks. A first-class article of the kind. Each, 25c.

No. 211 FORGED STEEL GARDEN TROWELS.



Size, 6 inch. Special attention is called to these forged steel garden trowels. The blade and shank are made of one piece of steel, being forged out in the same way as masons' brick trowels. The blade is finely polished. The rear part and shank are varnished a nice blue. They are strong and stout. Each, 50c.

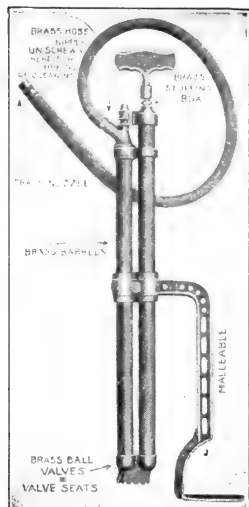
No. 211a BERRY TROWEL.



4½ inch berry trowel, narrow blade. Style as above. Each, 15c.

No. 215 ENGLISH PATTERN, EXTRA HEAVY GARDEN TROWELS.

These trowels have nice bright blades. Are riveted by the new method. The trowel of this number is the one I put in competition with other makes, and is a better article. Six inch, only size made. Each, 10c.



**No. 26 "LIGHTNING" ALL BRASS SPRAY PUMP.
WILL FIT ANY PAIL OR BUCKET.**

This pump is constructed entirely of brass, a material not affected by the poisonous arsenic used in the different formulas for spraying fruit trees, vines, shrubbery, etc. It is furnished with three feet of heavy best quality rubber hose, detachable.

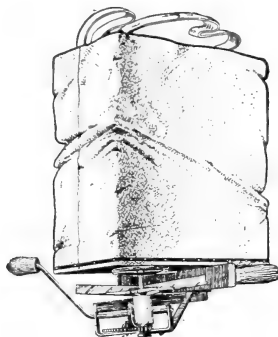
Pump can not be excelled for spraying trees, shrubbery, vineyards, washing windows, buggies, and whitewashing hen houses, etc. Price, \$2.50.

THE FOUNTAIN SPRAYER.

This three gallon sprayer is carried in one hand while the hose is held and spray directed with the other. The spray is started or stopped by a thumb lever operated in the same hand that carries the spray. The tank is tested to a pressure of 50 lbs. to the square inch. The amount of volume of the spray can be regulated by the pressure of the double valve, which starts or stops it. You can throw the spray over each hill of potatoes without wasting any material on the intervening space. In spraying small fruit trees the Fountain Sprayer is a practical machine up to 12 feet from the ground. Price, brass, \$7.00; galvanized iron, \$5.00.

**THE BATEMAN HOE.**

Light and strong and just the thing for innumerable purposes. It is especially adapted for spading around fruit trees and in grassy lawns. Every fruit grower should have two or three of these hoes. Three sizes. Price, No. 1, 75c; No. 2, \$1.00; No. 3, \$1.25.

GRASS SEEDER.

The best and most durable crank seeder made. Each, \$1.50.

**LOW-PRICED SPRAY PUMP.**

For Whitewashing, Window Washing, Buggy Washing, Tree Spraying, Etc.

This pump is furnished with a Calla nozzle, which may be graduated to give a solid stream or a coarse or fine spray. This pump has a brass cylinder and air chamber, hence will not corrode. It has a steel rod and is furnished complete with foot rest and discharge holes. It is designed to set in a pail or vessel of water, with the foot rest outside. It is also arranged to discharge a fine jet in bottom of bucket. This answers the same purpose as an agitator, keeps the whitewash or other mixture thoroughly mixed, and is especially recommended for whitewashing, spraying trees, bushes, flowers, etc. Price, complete, \$3.75.

INSECTICIDES.

Arsenate of Lead. It kills all leaf eating insects like potato bugs, coddling moth, etc. Sticks to the leaves like paint and will not injure the foliage. 1-lb., 25c; 5-lb., 80c; 10-lb., \$1.50; 25-lb., \$2.50; 50-lb., \$5.00; 100-lb., \$8.00.

Bordeaux Mixture—An effective remedy for all fungous diseases. This bordeaux is in pulp or liquid form and will not clog nozzles. Pint, 25c; quart, 40c; gallon, \$1.00.

Copper Sulphate—The most effective remedy for rot, mildew and anthracnose on grapes. Pear scab and leaf blight, apple scab, gooseberry mildew, blight and rot on potatoes, tomato and melon, and funguous disease. Quart, 60c.



Dethant—The Lawn Ant Destroyer that kills both the ants and eggs without injury to the grass. Dethant does not merely drive the ants away to found another colony, but kills them. Dethant will also destroy moles, which are nearly as great a pest in lawns as ants. Guaranteed. Pint, \$1.00.

Hellebore—Very effectual in destruction of rose slugs and currant worms. $\frac{1}{2}$ -lb., 15c; 1-lb., 25c.

Kerosene Emulsion—A valuable remedy against scale and all soft bodied and sucking insects, such as plant lice, leaf aphids, San Jose scale, thrip, etc. Pints, 25c; quart, 40c.



Pat. March 16 and Nov. 9, 1897.

Pat. in Canada Nov. 2, 1897,
and Jan. 25, 1900.

Bug Death—Is one of the most effective for chewing insects there is on the market. It is non-poisonous, does not injure the foliage and acts as a fertilizer as well as a bug killer. It is especially adapted to killing potato bugs, prevents blight and increases the yield. 1-lb., 15c; 3-lb., 35c; 5-lb., 50c; 12-lb., \$1.00.

Lime and Sulphur—A clear cherry colored solution of lime and sulphur that will not only kill the San Jose and oyster shell scale but is also one of the best fungicides in use. Quart, 25c; gallon, 50c; barrel of 50 gallon, \$8.00.

Nico-Fume—A nicotine liquid solution of great purity. $\frac{1}{4}$ -pint, 50c; pint, \$1.50; $\frac{1}{2}$ -gal., \$5.50; gal., \$10.50.

Paris Green—Strictly pure. $\frac{1}{4}$ -lb., 15c; $\frac{1}{2}$ -lb., 20c; 1-lb., 30c.

Hammond's Slug Shot—Destroys the bugs and does not injure the foliage, very effective for cabbage worms and lice. 1-lb., 15c; 5-lb., 40c; 10-lb., 75c; 20-lb., \$1.25.



Soap, Whale Oil and Tobacco—A simple and cheap preparation for destroying San Jose scale, plant lice and all sucking insects on tree, shrub and plants, vines and rose bushes. 1-lb., 15c; 5-lb., 60c.

TO-BAK-INE LIQUID.

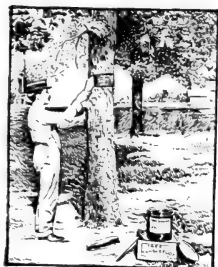
This is the most powerful spraying insecticide known. It contains 45 per cent. of pure nicotine. Where only a portion of the house is infested, they can be killed without going over the entire house. $\frac{1}{4}$ pint, 60c; $\frac{1}{2}$ pint, \$1.10; 1 pint, \$2.00; $\frac{1}{2}$ gallon, \$7.75; 1 gallon, \$15.00.

TO-BAK-INE FUMIGATING LIQUID.

This liquid is a concentrated solution of pure nicotine and capsicum, making the strongest fumigating insecticide known.

This is vaporized by means of alcohol lamps or steam pipes. 1 pint, \$2.00; $\frac{1}{2}$ gallon, \$7.75; 1 gallon, \$15.50.

TREE TANGLEFOOT.



Has been used for the past six years against the Gypsy and Brown-Tail Moths by the Metropolitan Park Commission of Boston, Mass., many other Park and Cemetery Boards in that vicinity and thousands of private individuals. It has also been used in various other sections of the United States against the Tussock Moth, Canker Worm, Bag or Basket Worm, Climbing Cut Worm and different species of Ants with perfect success. 1-lb., cans, 30c; 3-lb. cans, 85c; 10-lb. cans, \$2.65; 20-lb. cans, \$4.80.

HIGH GRADE FERTILIZERS.

Pulverized Sheep Manure—This is the pure natural manure, finely ground and dried. It makes the best top dressing for lawns, as it does not burn the grass, and gives out no disagreeable odor. It washes right down to the grass roots and is not unsightly. It makes a luxuriant growth of grass and gives it a dark green color, and is the most satisfactory lawn fertilizer we have ever used. It is excellent for mixing with the soil for greenhouse plants, one part manure to six parts soil. Strewn over and dug into the vegetable garden, or placed directly in the rows or hills it promotes a rapid steady growth till maturity of the plants. It makes the richest and quickest liquid manure. For use in the liquid form, one pound to five gallons of water will make a liquid that can be safely used daily if necessary. 50 lbs., \$1.10; 100 lbs., \$2.00.

Pulverized Manure—This is made from the clear fresh droppings from cattle in the stock yards. It is dried by a special process and then pulverized. There is no odor, and like the sheep manure it goes right down to the grass roots and can not be seen after wetting down the lawn. It makes a splendid lawn fertilizer and is equally as good for the garden and greenhouse. Many of our celery growers are using it on their celery with good results. 50 lbs., 80c; 100 lbs., \$1.50.

Sterlingworth Plant Tablets are much more effective than what is commonly known as "liquid manure," which contains a large percentage of waste matter which pollutes the soil and is generally accompanied by a disagreeable odor. Large size, contains 250 tablets (sufficient for 35 plants eight months), 50c postpaid; medium size (100 tablets) sufficient for 35 plants three months, 25c postpaid; small or trial size, 10c, postpaid.

Bone Meal—This is a very high grade of Bone Meal showing a large percentage of ammonia, and much richer in phosphoric acid than soluble bone. Analysis, ammonia 3 to 4 per cent.; total phosphoric acid 25 to 27 per cent. 1-lb., 5c; 10-lbs., 40c; 100-lbs., \$2.00.

Muriate of Potash—About 50 per cent. actual potash. This form can be used with Bone Meal or farm manures on fruit and vegetable crops, and is especially recommended for soils fairly rich in lime. 1-lb., 10c; 10-lbs., 50c; 100-lbs., \$3.00. Write for prices in ton lots.

Sulphate of Potash—48 to 52 per cent. actual potash. Excellent for potatoes and all root crops. Should be used instead of muriate on soils deficient in lime. Very beneficial to lawns on sandy light soil. 1-lb., 10c; 10-lbs., 50c; 100-lbs., \$3.00. Lower prices in ton lots.

Nitrate of Soda—Nitrate of Soda is the cheapest form in which to apply nitrogen to plants. Smash the lumps before using and apply as a top dressing at the rate of a hundred pounds per acre on the following vegetables when the plants are well established. Beets, cabbage, cauliflower, cucumbers, celery, egg plant, lettuce, spinach and onions. For asparagus a top dressing of 200 pounds per acre just as soon as the first shoots begin to show. For the home garden apply as a solution one ounce to two gallons of water. Price (Subject to market changes) 1-lb., 10c; 5-lbs., 25c; 100-lbs., \$3.50.

SPRAYING CALENDAR.

We present this table to assist the users of our Sprayers. They will find a complete list of applications for all kinds of vegetable and tree spraying, and when and what to use, and how often the ingredients should be used.

Notice.—In this calendar it will be seen that some applications are italicized and these are the ones which are *most important*. The number of applications given in each case has particular reference to localities in which fungous and insect enemies are most abundant.

PLANTS	First Application	Second Application	Third Application	Fourth Application	Fifth Application	Sixth Application
APPLE—Canker worm, codling moth, scab.	Before the buds burst, copper sulphate solution.	<i>Just before blossoms open, Bordeaux.</i>	<i>When blossoms have fallen, Bordeaux and Arsenites.</i>	<i>7-10 days later, Bordeaux and Arsenites.</i>	10-14 days later, Bordeaux.	10-14 days later, Bordeaux.
BEAN—Anthracnose	<i>When third leaf expands, Bordeaux.</i>	<i>10 days later, Bordeaux</i>	<i>7-10 days later, if heading, hot water 130° F. 10-14 days, if rot appears, Bordeaux.</i>	14 days later, Bordeaux		
CABBAGE—Worms, aphids.	<i>When worms are first seen, Kerosene emulsion</i>	7-10 days later, if not heading, renew emulsion		Repeat third in 10-14 days, if necessary.		
CHERRY—Rot, aphids, curculio, slug.	As buds are breaking, Bordeaux; when aphids appear, Kerosene emulsion.	When fruit has set, Bordeaux.		10-14 days later, Ammoniacal copper carbonate.		
CUCUMBER—Worms, mildew.	Before mildew becomes serious, Bordeaux.	If disease increases, repeat first application.	If worms persist, Helio-bote			
CURRENT—Worms, mildew.	<i>At first sign of worms, Arsenites.</i>	<i>10 days later, Bordeaux.</i>	<i>10 days later, Ammoniacal copper carbonate.</i>	<i>10-14 days later, repeat third</i>	10-14 days later, if disease appears, Bordeaux.	10-14 days, Ammoniacal copper carbonate. Make later applications of this if necessary.
GOOSEBERRY (English) Mildew, worms.	<i>When leaves expand, Bordeaux.</i>	<i>10-14 days later, Bordeaux.</i>	<i>When flowers are open, Bordeaux.</i>	<i>10-14 days later, Bordeaux.</i>		
GRAPE—Fly-beetle, fungous disease.	In Spring before buds swell, copper sulphate solution.	<i>When leaves are 1-1½ inches in diameter, Bordeaux.</i>	10-14 days, repeat first.	10-14 days, repeat first.	10-14 days, repeat first.	10-14 days, repeat first.
NURSERY STOCK—Fungous diseases.	<i>When first leaves appear, Bordeaux</i>	Before flowers open, Bordeaux.	<i>When fruit is grown, Bordeaux.</i>	<i>5-7 days later, Ammoniacal copper carbonate, etc.</i>	5-7 days later, repeat fourth, if necessary.	10-14 days later, Bordeaux if necessary.
PEACH, NECTARINE—Leaf curl, mildew, and rot.	Before buds swell, copper sulphate solution.	As buds are swelling, copper sulphate solution.	<i>After blossoms have fallen, Bordeaux and Arsenites.</i>	<i>9-12 days later, repeat third.</i>	10-14 days later, Bordeaux.	
PEAR—Leaf blight, scab, codling moth.	When buds are swelling, copper sulphate solution.	When blossoms have fallen, Bordeaux and Arsenites.	10-14 days later, Bordeaux.	10-20 days later, Bordeaux.	10-20 days later, Ammoniacal copper carbonate.	2-3 weeks before Plums ripen, Bordeaux.

POTATO—Beetle, scab, blight.	When beetles first appear, Arsenites.	When vines are two-thirds grown, Bordeaux and Arsenites. When fruit has set, Bordeaux.	5-15 days later, Bordeaux.	10-20 days later, Bordeaux.	10-20 days later, Bordeaux.
QUINCE—Leaf and fruit spot, rot.	When blossom buds appear, Bordeaux.	Before buds break, copper sulphate solution.	During the summer, if rust appears on leaves, Bordeaux.	10-20 days later, Bordeaux.	Repeat third if foliage rusts.
RASPBERRY—Blackberry—Dewberry—Strawberry—Rust.	As first fruits are setting, Bordeaux.	As first fruits are ripening, Ammoniacal copper carbonate.	Repeat first if diseases are not checked.	When last fruits are harvested, Bordeaux.	Repeat first when necessary.
TOMATO—Rot and blight, worms.	At first appearance of blight or rot, Bordeaux.	Mildew. Keep heating pipes painted with equal parts lime and water to a paste.	Black spot. Spray plants once a week with weak copper sulphate.	Red spider Kerosene emulsion under side of foliage.	Aphis. Kerosene emulsion.
ROSE—Mildew, black spot, red spider, aphids.	When blight is first seen, water, copper sulphate, Kerosene emulsion for insects.	When blight is first seen, water, copper sulphate, Kerosene emulsion for insects.	Repeat at intervals of 10 to 15 days, as necessary for blight.	NOTE—Use kerosene emulsion, very weak.	
VIOLET—Blight, red spider.					

SPECIAL NOTES.—For BLACK KNOT on cherries and plums cut out and destroy by burning the diseased parts as soon as discovered. For APHIDS on all plants use kerosene emulsion. If RED RUST appears the entire stools affected should be cut out and burned. YOUNG PLANTS should be sprayed with Bordeaux mixture at the time of the first and third applications to bearing plants.

FORMULAS.

Bordeaux Mixture.		Copper Sulphate Solution.		London Purple.	
Copper Sulphate.....	6 pounds	Copper Sulphate.....	1 pound	This is used in the same proportion as Paris Green, but as it is more caustic it should be applied with the lime, or with the Bordeaux mixture. Do not use it on peach or plum trees. For insects which chew.	
Quicklime.....	4	Water.....	15 gallons	Hellebore.	
Dissolve the copper sulphate by putting it in a bag of straw and tamping this in a vessel holding at least 3 gallons of water. Shake the bag until it is an equal amount of water. Then mix the two and add enough water to make 40 gallons. It is then ready for immediate use. For rots, moulds, mildews and all fungous diseases.		Dissolve the copper sulphate in the water, when it is ready for use. This should never be applied to peach and nectarines use 25 gallons of water for fungous diseases.		Fresh White Hellebore..... 1 ounce Water..... 3 gallons Apply when thoroughly mixed. For insects which chew.	
Ammoniacal Copper Carbonate.		Paris Green. (Arsenites.)		Kerosene Emulsion.	
Copper Carbonate.....	1 ounce	Paris Green.....	1 pound	Hard Soap..... ½ pound Boiling Water..... 1 gallon Kerosene..... 2 gallons	
Ammonia.....	9 gallons	If this mixture is to be used upon peach trees, 1 pound quicklime should be added. Repeated applications will injure most foliage, unless lime is added. Paris Green and Bordeaux can be applied together with perfect safety. The action of neither is weakened, and the Paris Green loses all caustic properties. For insects which chew.		Dissolve the soap in water, add the kerosene and churn with a pump for 5-10 minutes. Dilute to times before applying. For insects which suck, cabbage worms and all insects which have soft bodies	

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